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# THE MOTOR WORLD

DEVOTED TO THE AUTOMOBILE  
And Kindred Interests

Volume VI.  
No. 1.

New York, N. Y., U. S. A., Thursday, April 2, 1903

\$2.00 a Year.  
10 Cents a Copy.

*Columbia*

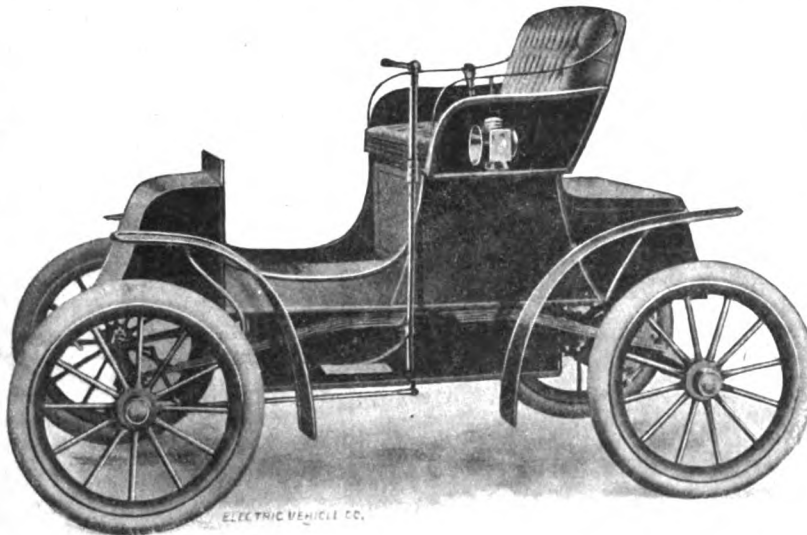
LIGHT ELECTRIC  
RUNABOUT MARK  
XXXVIII

Battery Beneath  
the Body.

Plenty of Room  
for "Carrying  
Things."

Five Speeds up  
to 15 miles per  
hour.

Rheostat Control.



Three-point Body  
Suspension.

No Jolts, Jars or  
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WITHOUT TOP \$900.00

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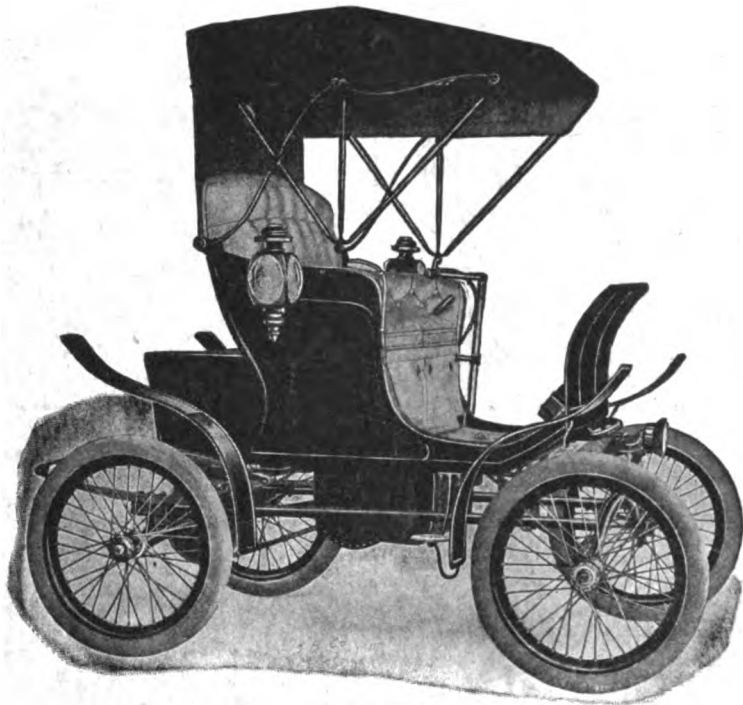
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Salesrooms: 134-136-138 West 39th St., NEW YORK. 74-76-78 Stanhope St., BOSTON. 1421 Michigan Ave., CHICAGO.



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THE STANHOPE.

THERE IS CHARACTER IN DESIGN  
AND THAT REFINEMENT  
IN THE FINISH OF

**BAKER  
ELECTRICS**

THAT PLACES THEM  
IN A DISTINCTIVE CLASS.



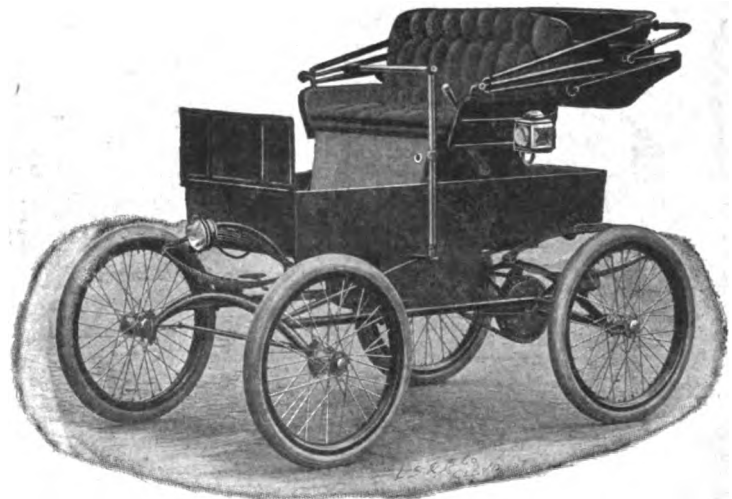
THE PLEASING LINES AND SERVICEABLE QUALITIES ARE ENDORSED AND APPROVED.

*THE BAKER REPUTATION IS DISTINCT AND WIDESPREAD.*

THE DEALER OF EXPERIENCE CARRIES  
A LINE OF ELECTRICS.

**THE BAKERS**

HAVE JUST THAT TOUCH OF REFINEMENT  
AND ATTRACTIVENESS THAT PUTS  
YOU IN TOUCH WITH THE  
BEST PEOPLE.



THE IMPERIAL.

A LINE TO US WILL BRING PRINTED MATTER.

**THE BAKER MOTOR VEHICLE CO.,**

**CLEVELAND, OHIO, U. S. A.**

# AMERICAN Clincher Rims

FOR THE

NEW UNIFORM CLINCHER TIRES

ARE

## ELECTRICALLY WELDED

BY THE

**Thompson Process**

*TO WHICH WE HAVE ADDED IMPROVEMENTS*

AND ARE MADE OF

## “Swedoh” Spring Steel

WHICH WE ROLL OURSELVES.

That is Why They Have Such a Large Sale.

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Write for Prices to

## AMERICAN TUBE & STAMPING CO.

BRIDGEPORT, CONN.



# DIAMOND DETACHABLE TIRES

The only Detachable Tire Manufacturer that has equipped its repair stations with facilities to rebuild every part of the Detachable Tire.

**A POINT WORTHY OF  
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**The  
Diamond Rubber  
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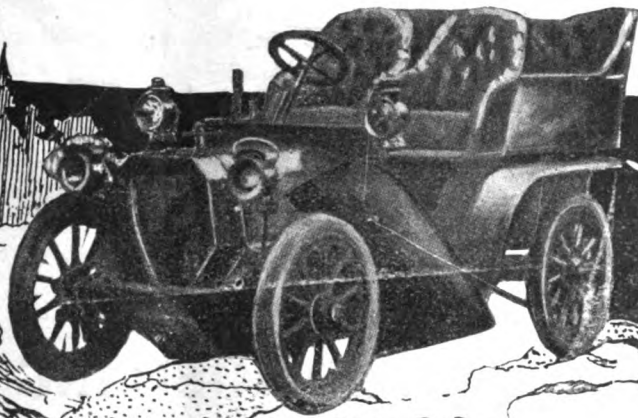
**Cleveland.**

**Chicago.**

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**San Francisco.**

# The MOYEA FOLLOWS NO STANDARD BUT SETS ITS OWN AND SETS IT HIGH



**M**ADE for the critical and for those to whom quality is the first consideration.

Truly a Triumph of American mechanical ability, incorporating the best foreign practice, with a refinement of detail and construction never before attempted.

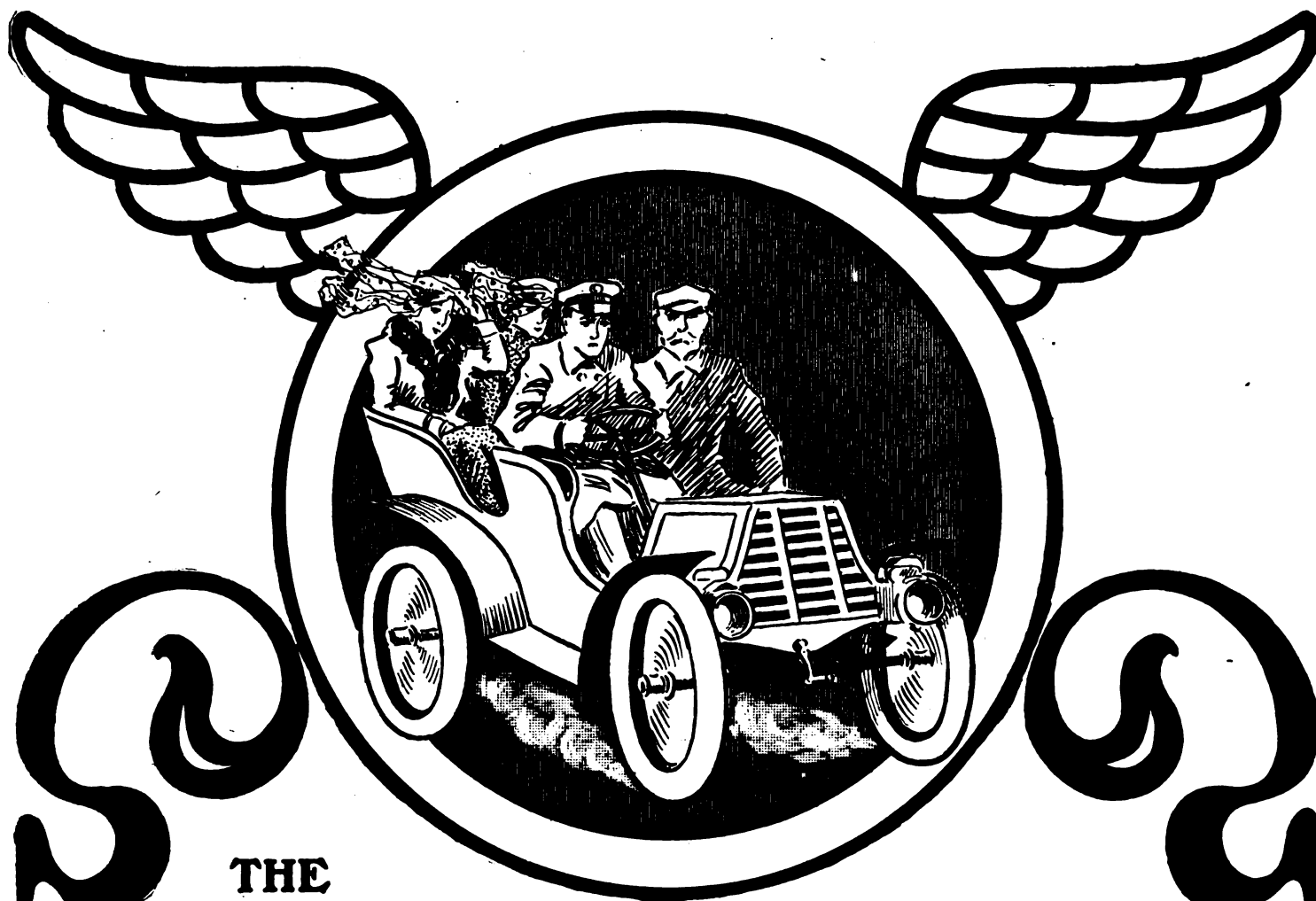
If you would possess one of these superb cars, now is the time to speak.

## Moyea Automobile Co.

3-7 West 29th Street,

NEW YORK CITY.





**THE  
PLEASURES OF AUTOMOBILING**

WILL BE GREATLY ENHANCED BY THE USE OF

**HARTFORD or DUNLOP  
PNEUMATIC TIRES**

**The ORIGINAL and "MODEL" TYPES of SINGLE  
AND DOUBLE TUBE TIRE CONSTRUCTION**

Appreciating the fact that requirements vary as to Single Tube and Detachable Tire Construction, we offer the most reliable of both types—*The Honest Standards.*

**THEY WERE BEST YEARS AGO, AND YEARS OF INTELLIGENTLY PERSISTENT,  
CAREFULLY DIRECTED EFFORT HAS MADE THEM BETTER TO-DAY.**

Where Quality is desired—where Comfort, Durability, and Protection against Annoyances is wanted—where All-round Satisfaction is demanded—these tires should be adopted. Let us prove this to you by sending you signed statements from some of the most prominent makers and users in this country.

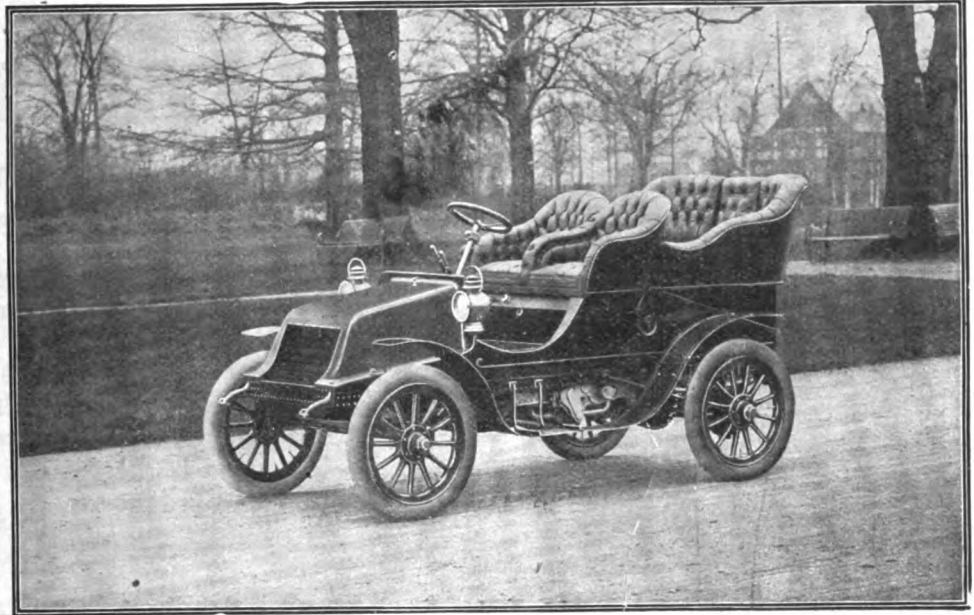
**The Hartford Rubber Works Company, Hartford, Conn.**

## WE ARE IN EARNEST

in advising you to place your order at once if you are going to get a

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So many folks are getting Winton 20 h. p. Touring Cars that somebody will surely have to wait. That somebody will be the man who trails in late with his order.



**PRICE, COMPLETE, \$2500**

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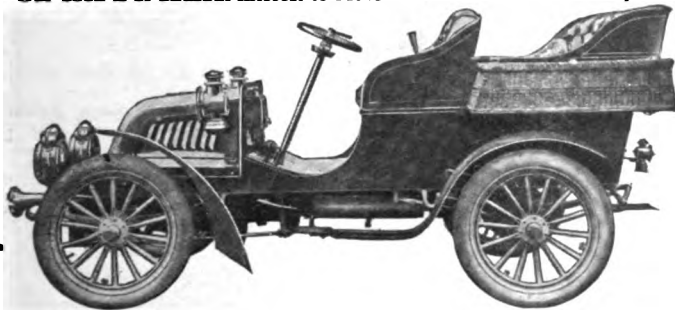
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Are Preeminent for Speed.

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TYPE C—TONNEAU. Two Cylinders. Vertical Engine.

Built for service, long runs and hill climbing, simply operated, free from vibration, each part easily reached, no intricate machinery to get out of order.

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# G & J TIRES

merit the attention of all who are looking for "the best tire" and will not be satisfied with anything else.

We make no noisy generalizations, which, like rockets, explode with much commotion, but end in nothing but vanishing smoke,

The proof lies in the unanimous verdict of satisfaction rendered by their users ever since pneumatic tires were first introduced, and in their great and constantly increasing use everywhere, which proclaims them to be of the highest quality that skillful workmanship and best material can produce.

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**"Only Known Values are Imitated"**

*Do not be misled by imitations. Demand the "G & J." and money will be saved by getting more wear with fewer repairs.*

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**A TRADE TERM:**

**"WESTON-MOTT QUALITY"**  
**IN WHEELS.**

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**GET WITH US.**

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**WESTON-MOTT CO., Utica, N. Y.**



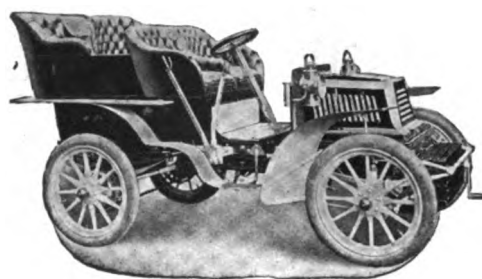
## Three Gold Medals.



New York-Boston Reliability Contest.

# The Searchmont

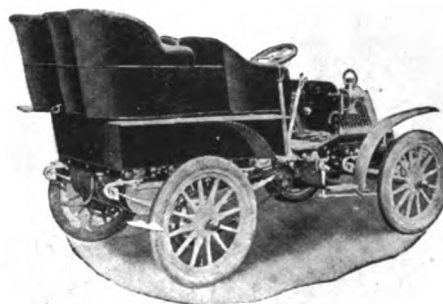
"AMERICA'S LEADING AUTOMOBILE."



FRONT VIEW—TYPE VII.

The MOTOR has FOUR ALUMINUM DOORS, which can be removed in a few minutes, permitting the adjustment of rods or of any of the internal bearings, without pulling the motor apart.

Our New Catalogue explains many other features which will appeal to the experienced motorist.



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FACTORIES: SEARCHMONT (NEAR CHESTER), PA.

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GITHENS BROTHERS CO., Chicago.  
JONAS AUTOMOBILE CO., Milwaukee.  
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SPECIAL MOTOR VEHICLE CO., Cincinnati.

# **"THE RED DEVIL" AND THE TIRES THAT EQUIPPED IT.**

The Honorable Tom L. Johnson Tells His Experience

—WITH—

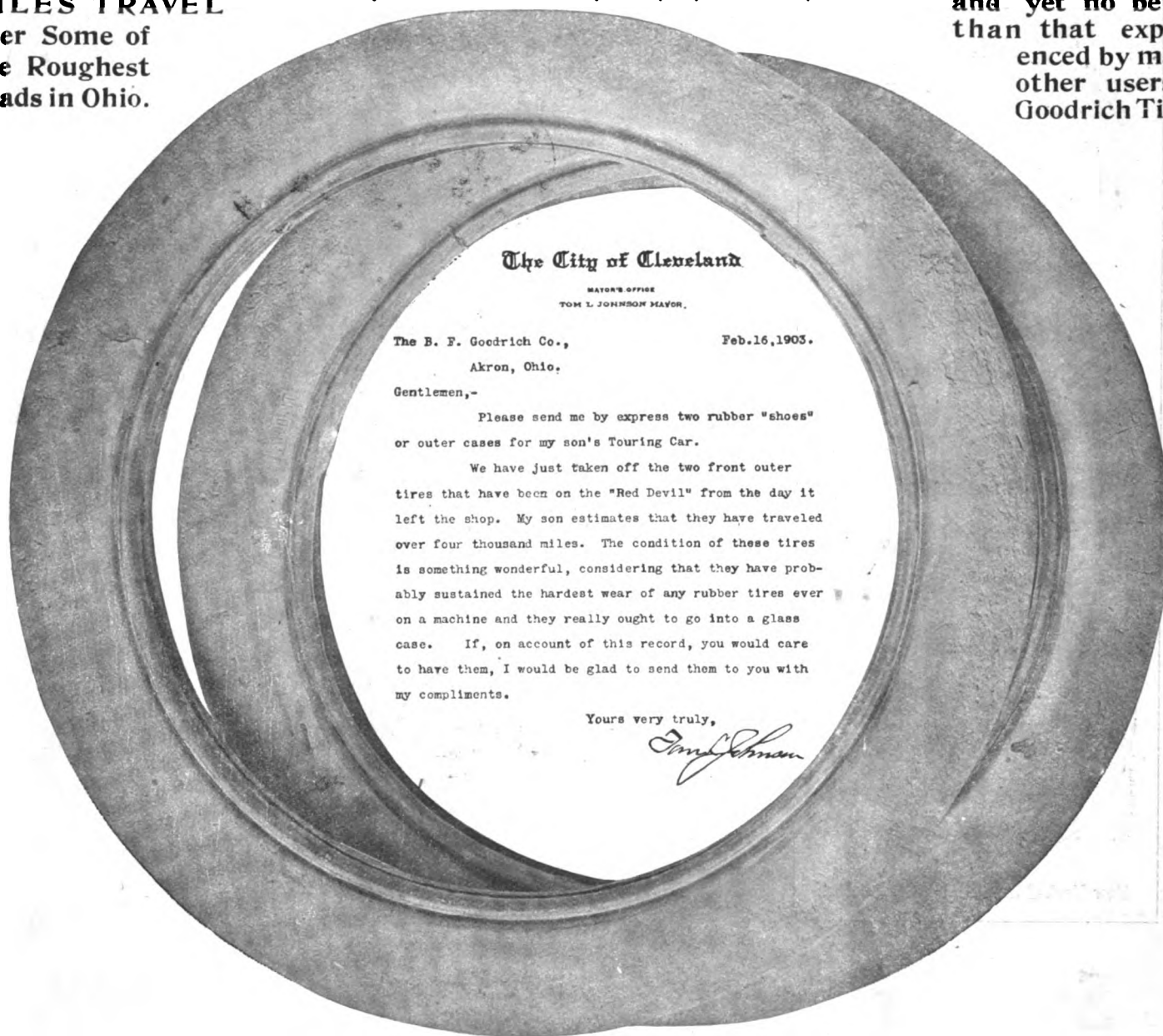
## **Goodrich Clincher Automobile Tires**

As Equipment on the Famous  
"Red Devil" Touring Car.

**FOUR THOUSAND  
MILES TRAVEL  
Over Some of  
the Roughest  
Roads in Ohio.**

**READ THE LETTER !**

A wonderful record  
and yet no better  
than that experi-  
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other users of  
Goodrich Tires.



The above cut is a true picture of the tires referred to in Mr. Johnson's letter. No attempt having been made to retouch the photograph or obliterate in any way the marks of wear.

**THE B. F. GOODRICH COMPANY,**

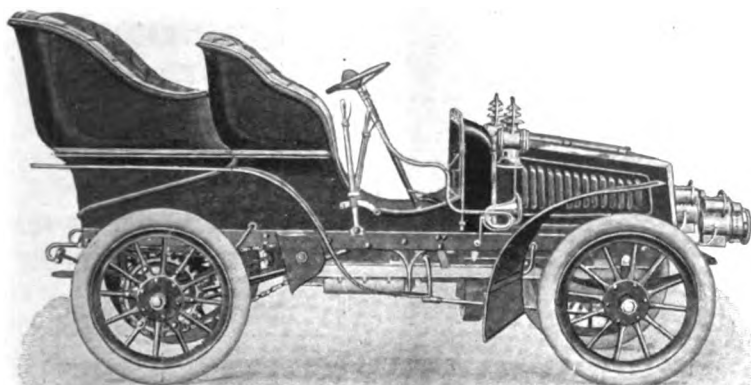
Akron Rubber Works,  
**AKRON, OHIO.**

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BOSTON, 187 Summer Street.

LONDON, ENGLAND, 7 Snow Hill, E. C.

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# An Automobile is Only as Strong as its Weakest Part.



**1903 MODEL, 4 CYLINDER, 24 BRAKE HORSEPOWER TOURING CAR.**

*This car was a feature of both the New York and Chicago Automobile Shows.*

Careful engineering in designing and arduous road tests have determined to a nicety in the high quality Touring Car

*"Toledo"*

correct proportions for carrying loads, and for withstanding vibration due to uneven roads. One part is proportionately as strong as the other. Follow the construction of the "TOLEDO" throughout and you cannot help but be impressed that the time spent upon its engine and transmission insures silent, smooth running carriages of great durability and long life. Pistons, connecting rods, fly wheels—in short, all reciprocating parts—are accurately balanced, resulting in a continuous, even motion.

*Tell us your requirements and about how much you wish to invest. We will send complete catalogues; interesting automobile literature; gladly answer any questions you wish to propound and give you the address of our agent nearest you.*

**INTERNATIONAL MOTOR CAR CO., 3065 Central Ave., Toledo, Ohio.**

**"LARGEST AUTOMOBILE FACTORY IN THE WORLD."**

## RESULTS at the NEW YORK SHOW Prove the "YALE" MOTOR CAR a Success.

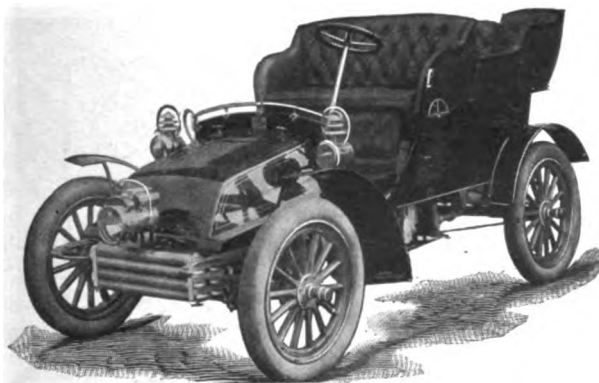
**WE DEMONSTRATED TO ALL COMERS AND DID BUSINESS.**

**A RATIONAL VEHICLE,**

**AT A RATIONAL PRICE,**

**\$1750.**

**NO VARIATIONS.**



**SIMPLICITY—**

**STRENGTH.**

**ELEGANCE IN DESIGN.**

**THOROUGHNESS IN  
WORKMANSHIP.**

**WE HAVE APPOINTED THE FOLLOWING AGENTS AND WILL CONSIDER A FEW MORE:**

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PARDEE & COMPANY, Chicago, Ills.  
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W. E. METZGER, Detroit, Mich.  
F. J. READ, Newtonville, Mass.  
QUILLING BROTHERS, Cleveland, Ohio.

JAMES LUCEY, Troy, N. Y.  
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**THE KIRK MANUFACTURING COMPANY, Toledo, Ohio.**



AMERICAN.  
ORIGINAL.  
SUBSTANTIAL.  
TRULY SIMPLE.  
SILENT.  
SMOOTH RUNNING.  
CONVENIENT.  
POWERFUL.  
COMFORTABLE.  
BEAUTIFUL.



SELF-OILING ENGINE.  
NEW STYLE MUD  
GUARDS.  
SENSIBLE IGNITION.  
Plug Won't Short Circuit.  
JUMP SPARK.  
SPECIAL COILS.  
20 GALLONS FUEL.  
7 GALLONS WATER.  
Centrifugal Geared Pump.  
CIRCULATION GAUGE.  
All Bolts Case-Hardened.

THE 16-H. P. four-cylinder touring car shown above represents the best development in gasoline automobiles up to date. IMPROVEMENTS:—Throttle control from steering wheel, simplified sliding gear transmission (interlocking); all steel CHASSIS, allowing customer to order any desired body; valves removable in minimum time; spark-plugs connected to cables by chains, thus preventing snapping of wires. We make both 9 H. P. and 16 H. P. cars and employ the front vertical motor exclusively. Many other advantages. Write for full information.

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BRANCHES: 76th St. and Broadway, New York, Boston, Philadelphia, Chicago, London, Paris.

EXECUTIVE OFFICES MOVED FROM 7 E. 42d St., NEW YORK TO BRIDGEPORT, CONN., ON APRIL 1st.

Agents for  
**THE  
ELECTRIC  
VEHICLE CO.**



8 H. P. MORS.

Prompt Deliveries of  
8, 11, 18 H. P.

**MORS**

# FRENCH AND AMERICAN AUTOMOBILES.

AGENTS FOR  
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HENRY FOURNIER, MGR.

REPAIRS.

THE  
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Automobile Co.**  
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**ALL KINDS OF FRENCH AUTOMOBILE PARTS KEPT IN STOCK.**

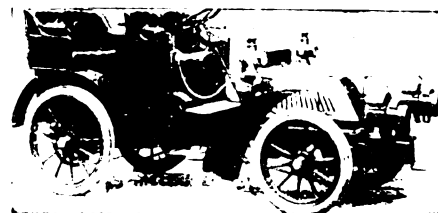
**ELECTRICS CHARGED AND KEPT IN FIRST-CLASS ORDER.**

11 & 18  
H. P.

**MORS**

1903 Model

Attracted special attention  
**PARIS AUTO SHOW.**



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Prompt Deliveries of  
**RENAULT,  
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Nerrick Road Race,  
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Contest.  
Pike's Peak.  
500 Miles Endurance Run.  
Glasgow Reliability Trials  
Pan American Exposition.  
Speed Trials, Coney Island  
Boulevard.  
Eagle Rock Contest.



**VICTORIES :**

Roslyn Hill, April, 1902.  
Liverpool Exhibition, 1902  
Paris-Nice 600 Miles  
Caravan.  
Box Hill Speed Trials.  
100 Miles Run, New York  
to Bridgeport.  
Staten Island Speed Trials  
Chicago Club,  
100 Mile Test.  
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**T**HE Locosurrey illustrated above is one of our 1903 Steam Models. A fine family car for city or country use. **IMPROVEMENTS.** Steam water and air pumps; Klinger gauge; Pilot light; very large water and fuel tanks; superheated steam; enlarged boiler; two sets independent brakes—Many other attractive improvements. We are the pioneer builders of steam cars in this country and have placed 5,000 Locomobiles in the hands of customers. Our experience, therefore is unequalled and our cars are the best. Write for new booklets.

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**It's Easy to See**



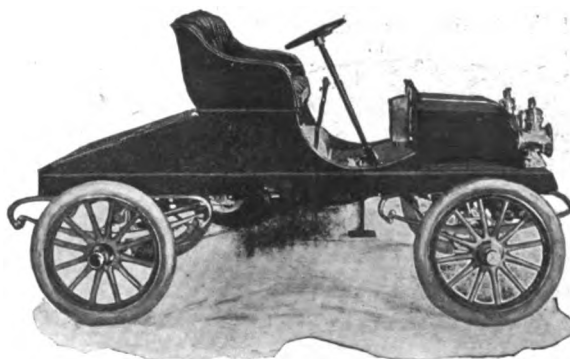
WITH TONNEAU ATTACHMENT.

Tonneau, giving extra seating capacity furnished if desired. This gives it all the advantages of a Touring Car. The 8 h. p. engine and perfect mechanism make it serviceable on any road. Write for catalog.

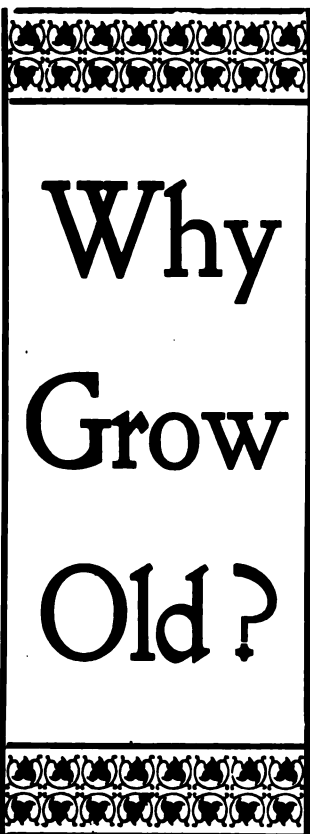
The advantages possessed by

# The General

Comfortable riding, dependable mechanism, ample power, easy steering and operating.



**THE GENERAL AUTOMOBILE & MFG. CO.**  
CLEVELAND, OHIO.



# THE FOUNTAIN OF YOUTH IS AT French Lick Springs

IN THE HIGHLANDS OF SOUTHERN INDIANA,  
ON THE



**Pluto Spring** is a veritable fountain of youth. It arouses the torpid liver, renews the vigor, and makes a new man of you.

**New Modern Hotel,** all outside rooms, accommodates 800 guests, under the management of Thomas Taggart, formerly of the Grand Hotel, Indianapolis. Excellent cuisine.

GOLF, HORSEBACK RIDING AND ALL KINDS OF OUTDOOR SPORTS.

Excursion rates from all parts of the country.

Send for illustrated booklet.

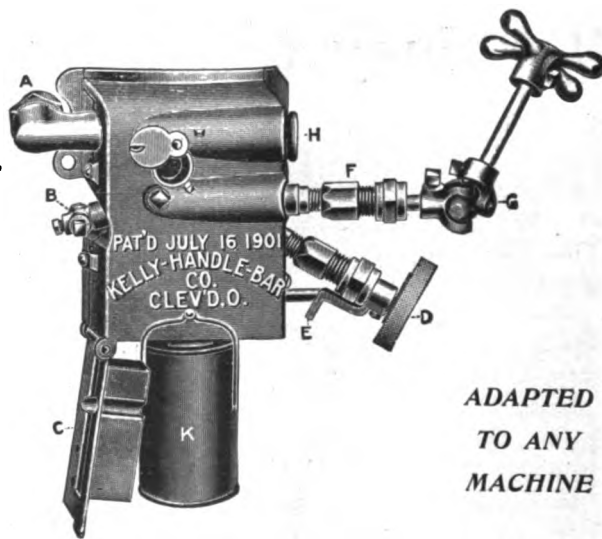
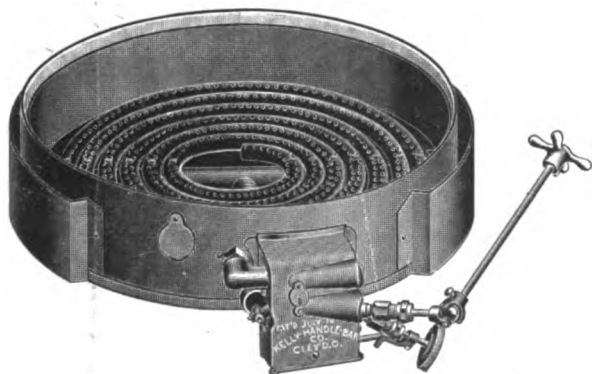
CHAS. H. ROCKWELL,  
Traffic Manager.

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## THE NEW KELLY GENERATOR

for Steam Vehicles is a Trouble Saver.

No Steam Car is complete without one. Does away with drip cups and all annoyances. Perfected in every way and always reliable. Strongly made with all connections outside. Easily adjusted. No flaring or flashing in lighting, even in the strongest wind. Main fire controlled at seat. Compact and neat in appearance and enclosed in aluminum case.



ADAPTED  
TO ANY  
MACHINE

### The New One-Piece Steel Tubular Burner

with entirely new casing. Has no gauze or holes in the bottom, the air being taken in from the ends. Absolutely eliminates all danger of fire under-lapping. As there are no air-tubes through the continuous stop-tube the burner even if red-hot cannot back fire. One of the most important improvements yet made. Thoroughly tested—as are all our products. Write for circular.

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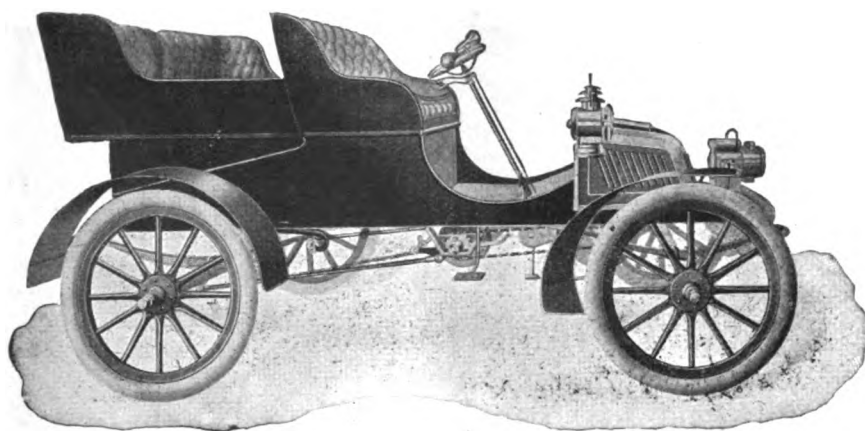


# An Ounce of Performance <sup>is worth</sup> A Ton of Explanations

**T**HE uniformly perfect performances of the **ELMORE** two-cycle motors in every public reliability test and the strongest testimonials from users all over the land, explode

**at every revolution**

the statements that a two-cycle engine is not practical in an automobile.



The advantages of the two-cycle motor are obvious—simplicity itself, no parts or valves to get out of order—no complexity anywhere. The very simplicity of construction is one of the reasons why we can offer a \$1500 7 H. P. Automobile for \$800, and a 10 H. P. Touring Car at \$1400—a figure unequaled in the wide, wide world. You'll be the gainer by writing us at once.

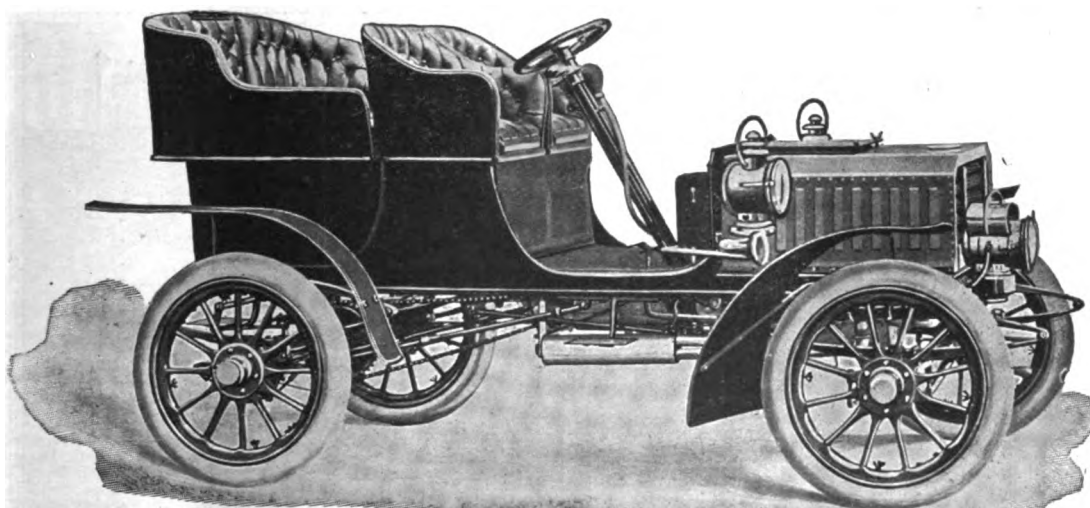
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## BUFFALO'S PIONEER AUTOMOBILE MANUFACTURER

EXPERIENCE COUNTS AND WE HAVE HAD FIVE YEARS OF IT.

Can you afford to sell your customers experiments? Our touring car is unsurpassed in quality and equipment by any.

Prompt Deliveries.



The **CONRAD** 8 H. P. Gasoline Runabout is the only one made in U. S. having a vertical double cylinder motor, wheel steer and sliding gear transmission, which sells for less than \$1000. Price \$750

**CONRAD GASOLINE 12 H. P. TOURING CAR. PRICE \$1250.00.**

**THE CONRAD MOTOR CARRIAGE COMPANY, 1413-1419 Niagara Street, Buffalo, N. Y.**

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## The NEW WHITE STEAM TONNEAU for 1903



### AN AUTOMOBILE THOROUGHbred.

The White Steam Motive power has made records in reliability contests, in races, and in every-day use which speak for themselves.

*Write for full particulars, diagrams of engine, experts' reports and official results of important endurance contests.*

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(Automobile Department)

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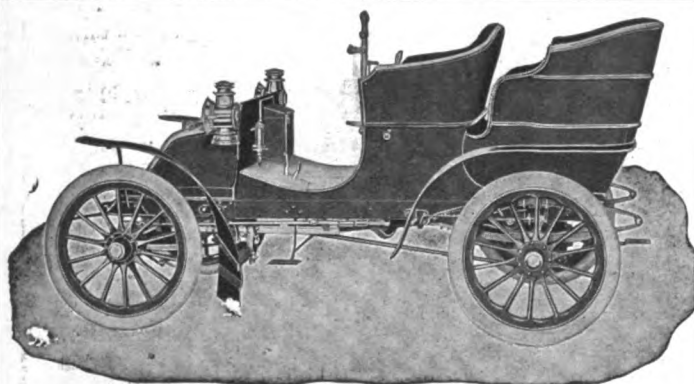
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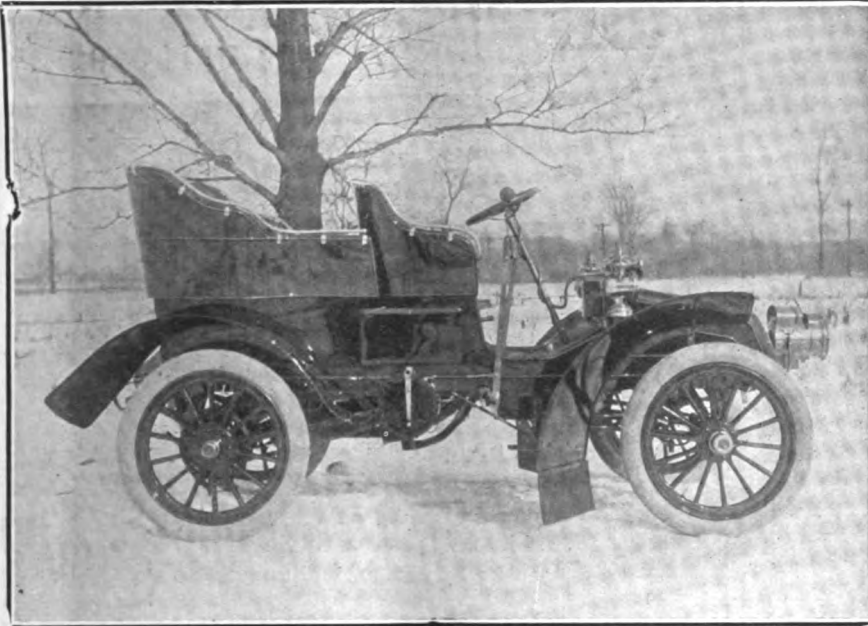
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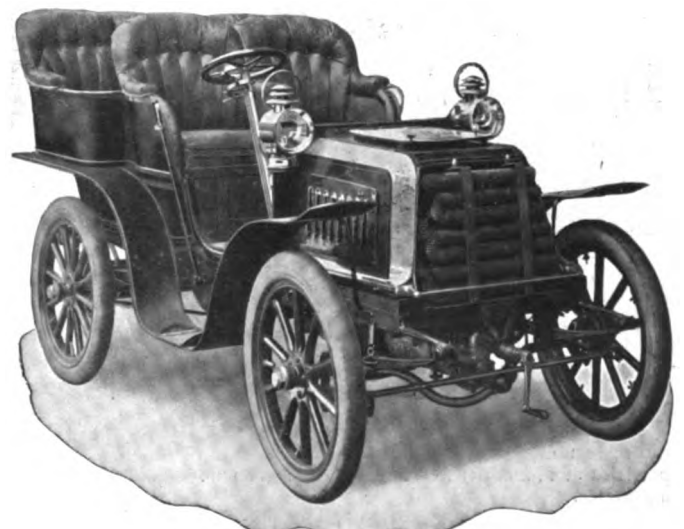
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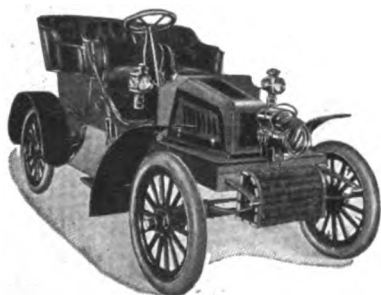
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**CADILLAC AUTOMOBILE CO., Detroit, Michigan.**

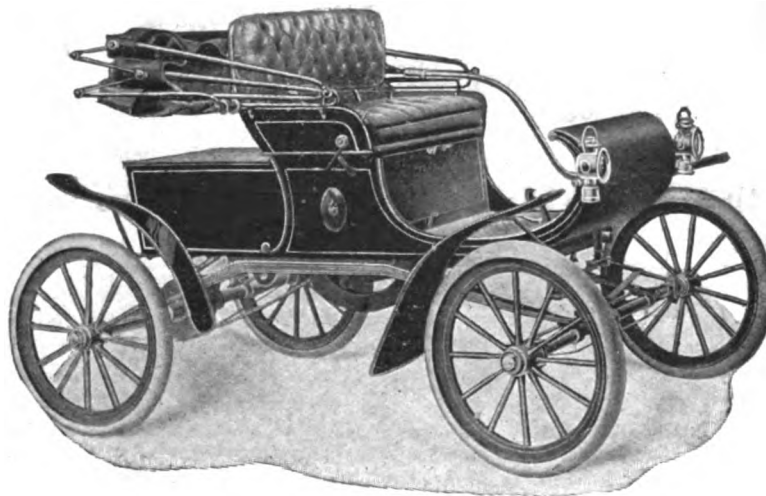
**Owls and their locations:**

- Row 1: Cadillac Automobile Co. of Illinois, Chicago, Ill.; John Wanamaker, Philadelphia, Pa.; William E. Metzger, Detroit, Mich.; Pence Automobile Co., Minneapolis, Minn.; Conrad Mueller Co., Indianapolis, Ind.; Cadillac Co. of New York, New York City.
- Row 2: Norman W. Church, Los Angeles, Cal.; Centaur Motor Vehicle Co., Buffalo, N. Y.; Michigan Automobile Co., Grand Rapids, Mich.; Crescent Automobile Co., Jersey City, N. J.; New Jersey Automobile Co., Newark, N. J.; R. W. Whipple, Binghamton, N. Y.; Oscar S. Lear, Columbus, Ohio.
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- Row 4: Peckham Carriage Co., Dayton, Ohio.; F. O. Bailey Carriage Co., Portland, Me.; The Hanauer Automobile Co., Cincinnati, Ohio.; Adolph A. Geisel, Springfield, Mass.; Birney A. Robinson, Worcester, Mass.; James Lucey, Albany and Troy, N. Y.; Fred A. Mabbett & Co., Rochester, N. Y.
- Row 5: Irvin W. Dill, Carriage Works, Harrisburg, Pa.; Brown, Thomson & Co., Hartford, Conn.; Charles E. Whitten, Lynn, Mass.; Elmira Arms Co., Elmira, N. Y.; Theodore Jonas, Milwaukee, Wis.; Murphy Bros., Erie, Pa.; Hyslop Bros., Toronto, Ont.

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It is an easy matter for optimistic and ambitious manufacturers to build an automobile which is superior to all others—on paper—but to correctly solve the problems of automobile construction it is necessary to build a machine that "goes"; that will keep on going and one free from the dangers of "accidents" or "breakdowns" in races or endurance contests. Such a machine is

## The Oldsmobile



**PRICE, \$650.00.**

It has won the highest awards in all open contests, as well as proving to individual manufacturers its superiority when challenged to maintain its acknowledged supremacy. Experience is the best teacher as to the correct proportions and proper material for connecting rods, crank shafts and important working parts, and the record of efficiency of the OLDSMOBILE is positive proof of the mechanical perfection, mathematical accuracy and the high grade of material used in the Standard Runabout, which is "built to run and does it." Its simplified mechanism leaves "nothing to watch but the road," and its unvarying reliability easily makes it "The Best Thing on Wheels."

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CHICAGO, ILL.—Oldsmobile Co., Githens Bros. Co.  
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DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
DETROIT, MICH.—Oldsmobile Co.  
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HOUSTON, TEXAS—Hawkins Automobile & Gas Engine Works.  
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### \$1,000 AUTO RACE.

Fisher Defeated Mueller in 100-Mile Run Over Bad Roads.

INDIANAPOLIS, March 24.—Carl G. Fisher won the thousand dollar automobile race today against Conrad Mueller. The course was from this city to Columbus and return, a distance of 100 miles. The roads were very heavy and rough, several obstacles having to be overcome. Fisher made the distance in a little less than six hours, and was enthusiastically received here by the local automobile club. The other machine had a breakdown.

### Field Day at Fort Wayne.

Fort Wayne, Ind., March 24. Events of the day.

*Of course the winner was an Oldsmobile—*

# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, April 2, 1903

No. 1

## NINE YEARS AGREEMENT ON SELDEN PATENT

**19 Makers of Gasolene Cars Form Association of Licensed Automobile Manufacturers—  
F. L. Smith, President, Geo. H. Day, General Manager—Initial Payment \$3500.—  
The Policy of the Organization, and how its Royalties Will be Divided.**

For six months past it has been no secret from the Motor World, and from certain ones in the automobile trade, that a combination for protective and licensing purposes was in process of being formed with the Selden patent as a basis.

The work of promoting this project and supervising the preliminary steps was done by George H. Day, president of the Electric Vehicle Co., of Hartford, which concern owned the patent. The organization was practically completed on the days of March 3, 4, 5 and 6, and officers were elected at the Manhattan Hotel, New York City, on the date last mentioned. There were still further details to be perfected, and The Motor World, under the injunction of a confidence, refrained from announcing the news. Another person in the confidence of the organizers, however, acting without their consent, spread the news broadcast through the daily papers last Wednesday just after The Motor World had gone to press. The news as offered by the dailies, though, left much to be explained as to the purposes and the significance of the Association of Licensed Automobile Manufacturers, as the organization is titled.

For the industry of motor vehicle making, for the dealer in automobiles and for the persons who purchase them the perfection of this association is quite the most important event that has occurred in this relation in this country. It means that a fundamental patent on all sorts of automobiles that use a hydrocarbon explosive engine has been recognized by the courts and by the principal manufacturers in this country, and that no one can either make or sell an automobile propelled by a gas engine without being

licensed by those who control that basic patent issued to George B. Selden. The exclusive license rights of the patent, purchased by the Columbia and Electric Vehicle Co. Nov. 4, 1890, are now controlled by the new Association of Licensed Automobile Manufacturers, which with abundant capital and other facilities is prepared to prosecute infringements and to issue license rights to such as they choose. In a word, representative makers, after having seen a test case decided by the court in favor of the validity of the patent, have agreed to recognize it, pay license fees and to pool their interests in order to compel all others to do the same or to fight it out in the courts.

In thus combining the allied manufacturers have also agreed to place subject to the call and disposal of the Association certain patent rights held individually by them which cover details of construction, transmission, steering and other features in variety enough to protect practically every detail of the modern automobile. By doing this the individual makers turn the work of protecting their own patent rights over to the Association and thus save trouble and expense to themselves, while at the same time giving the combine an absolute control over the whole business in gasolene automobiles in this country. No gasolene automobiles can be made and none sold, either domestic or foreign, hereafter without paying license fees to the Association or inviting suit from that combination.

Although one of the most powerful industrial combinations ever effected, the Association of Licensed Automobile Manufacturers does not propose to exercise any cramping suzerainty over the trade, but instead to promote the industry and conserve the interests of the public. This it has a peculiar power to do. In this connection one

of the members of the Association when interviewed yesterday said:

"It is not the intention to make the Association a 'close corporation.' On the contrary, its money will be expended and the efforts of its officers put forth to further the best interests of the automobile business and prevent abuses. It will be our object to improve the standard of the American automobile, and to see that purchasers get full value for their money by putting a check upon any 'wildcat' or get-rich-quick promotions. There is noticeable even now a tendency on the part of irresponsible persons to copy devices which established makers have spent thousands of dollars to perfect, and to assemble in the end a trashy article that sells on looks but will not give satisfaction. There is a tendency on the part of men having small machine shops to put up flimsy engines and carriage bodies and dispose of them, which they are now enabled to do because of the demand for automobiles exceeding the supply. This sort of business the Association can and will stop. It will not try to shut out reputable and established manufacturers who build a reliable vehicle; it will license all such, but it will license no unreliable upstarts. In this way the Association will protect the public and be a boon to all purchasers of gasolene automobiles.

"Undoubtedly a number of manufacturers who are not now members of the Association will be invited to join and become one of the licensees united to sustain the patents. The Association as now formed controls nearly 500 patents and a number of others of great importance which shortly will be issued will be controlled by the Association.

"With regard to foreign automobiles with gasolene engines, the importers of them will be shown every courtesy and the opportunity tendered them to do business under the

same conditions of licensing that exist for Americans, but imported gasoline vehicles cannot be sold here without the licensed authority of the Association."

An idea of the financial strength of the new combination can be surmised from the fact that the initiation fee for membership is \$2,500, plus \$1,000 to cover in full royalties due on previous production. After this \$3,500 "cash in advance" has been paid the members agree to pay quarterly a certain royalty on their catalogued selling price on every vehicle produced by them. Of this money a certain percentage goes to the Electric Vehicle Co. and the balance goes into the treasury of the Association. The treasury balance of the Association will be a fund for whatever litigation may be necessary, and it will be subject to the action of the executive committee. It is estimated that the Association will start with nearly \$100,000 cash on hand.

All royalty fees begin to accrue from January 1, 1903, from which date the licenses extend until the year 1912, when the patent will expire. The date for the annual meeting has been fixed as the first Wednesday in November.

The officers of the Association elected March 6 at the meeting in the Manhattan Hotel are: President, F. L. Smith, of the Olds Motor Works, Detroit, Mich.; vice-president, Barclay H. Warburton, of the Searchmont Automobile Co., Philadelphia, Pa.; secretary and treasurer, Henry B. Joy, of the Packard Motor Car Co., Warren, O.; general manager, George H. Day, of the Electric Vehicle Co., Hartford, Conn.

General Manager Day will be the active executive, with offices at 100 Broadway, New York, and will hereafter devote most of his time to the work of the Association.

The executive committee is comprised as follows: President F. L. Smith; E. H. Cutler, of the Knox Automobile Co., Springfield, Mass.; M. J. Budlong, of the Electric Vehicle Co., Hartford, Conn.; Charles Clifton, of the George N. Pierce Co., Buffalo, N. Y.; S. T. Davis, Jr., of the Locomobile Company of America, Bridgeport, Conn.

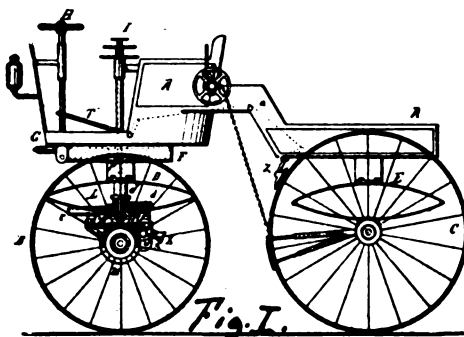
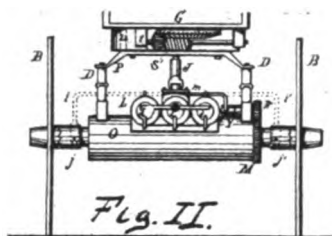
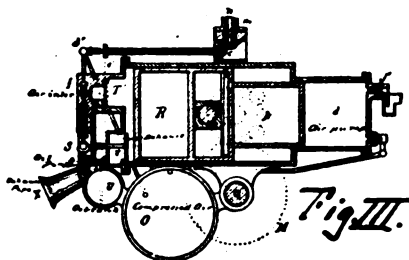
The Association begins its career with the following members and licensees:

The Winton Motor Carriage Company.  
The Olds Motor Works.  
The Packard Motor Car Co.  
The Peerless Motor Car Co.  
The Haynes-Apperson Co.  
The Apperson Bros. Mfg. Co.  
The Searchmont Automobile Co.  
The Locomobile Co. of America.  
The Geo. N. Pierce Co.  
The Knox Automobile Co.  
The Autocar Co.  
The Electric Vehicle Company.  
The U. S. Long Distance Automobile Co.  
The Pan-American Motor Car Co.  
The International Motor Car Co.  
The Pope-Robinson Co.  
The Waltham Mfg. Co.  
The J. Stevens Arms & Tool Co.  
The H. H. Franklin Mfg. Co.

The perfection of this powerful and promising organization has been effected only after years of litigation and a great expenditure of money in the effort to establish the value of the Selden patent. The history of this patent and of the litigation now becomes a matter of deep interest to all the trade.

The Selden patent, the establishment of whose validity by the courts made this Association possible, was granted to George B. Selden on November 5, 1895, and is numbered 549,160.

Mr. Selden is a Rochester man and son of former Judge Henry R. Selden, for many



years a Judge of the Court of Appeals of this state. His son was a lawyer of repute, practicing in Rochester. One of his chief amusements was experimenting with horseless carriages, and after six years of experimental work with five or six different types of engines he finally produced one that worked to his satisfaction, and he filed an application for a patent upon this May 8, 1879.

It now appears that there was some design in the long delay between Selden's application and the granting of the patent, for the inventor did not press his case very strongly in the patent office, merely complying with the law to a sufficient extent to keep his application alive. The patent was granted on the original and the amended application the year before the business of making and selling automobiles in America began to assume any considerable importance. The advantage to the inventor is evident to all who con-

sider that the patent, while granted on a basis of the conditions existing at the time the application is made, lives for a period of seventeen years following its date of issue.

Selden knew that under the law which was in force up to 1897 an application for a patent could not be considered to have been abandoned if prosecuted within two years after the last official action. By complying with the letter of the law, Mr. Selden managed to delay the granting of his patent for sixteen and one-half years.

The record of the case in the Patent Office shows that the application was rejected May 31, 1879, and that an amendment was filed May 26, 1881, nearly two years later. A second rejection on June 17, 1881, was followed on May 15, 1883, by another amendment; and a third rejection on May 26, 1883, was met by an amendment filed on May 18, 1885. An official letter sent to Mr. Selden on June 15, 1885, was not acted upon until June 13, 1887, only two days before the expiration of the two years of grace allowed by the statute. Another rejection on June 21, 1887, was answered by a letter dated April 13, 1889, and by an amendment filed June 10, 1889.

Mr. Selden was required on June 14, 1889, to furnish a "smooth copy" of the specification prior to issue; but, although the application was otherwise ready for allowance, it was not until June 5, 1891, nine days before the statutory limit, that the substitute specification was filed. An official letter of July 1, 1891, demanded a new oath prior to issue, but it was not until June 28, 1892, that Mr. Selden obeyed the order. The case was then transferred to another examiner, by whom some of the claims previously allowed were rejected on July 29, 1893. The next amendment was filed on April 1, 1895. The patent was finally granted on November 5, 1895, just at about the same time when the motor carriage began to make its appearance in the streets of our large cities. All of the nineteen original claims were cancelled.

The nature of Selden's invention may be seen from the accompanying drawings, reproduced from the letters patent. Figure 1 is a side elevation of the carriage, Figure 2 a front elevation and Figure 3 a vertical section through the engine employed.

The motor, L, is mounted on the front truck, with the cylinders arranged transversely to the driving shaft and the air reservoir, O. The carriage axle is driven from the motor by the gears, M N. "Any form of liquid hydrocarbon engine of the compression type may be employed," says Mr. Selden in his specification. In the carriage shown, however, air is compressed into the reservoir, O (Fig. 3), by an air pump, d, and admitted to the working chamber, R, by a valve, f, operated by a cam shaft, S. Gearing, M, is employed to drive the cam shaft. As air is admitted to the working chamber a quantity of liquid hydrocarbon, taken from the tank, U, is injected into the combustion chamber, T, by the pump, g. The products of combustion are ejected from the pipe, X, by the opening of the

(Continued on page 29.)



## INCORPORATED CHAUFFEURS

### Gasolene Car Operators Cut Loose From Others and Organize—The Outlook.

All that was foreshadowed regarding the chauffeur situation in New York in the Motor World last week has come to pass. The operators of gasolene cars divorced themselves from all their fellows and proceeded to organize by themselves. Articles of incorporation were filed at Albany on Wednesday of last week for the Chauffeurs' Association of America, which was the name finally pitched upon.

The incorporators are: Harry H. Hill, Van Alen Soule, Sam Brock, Fred Walsh and Charles E. Neal. Neal has been elected temporary treasurer. Herbert T. Francis, lately chief engineer for Alfred Harmsworth, and now operating for J. A. Ripley, will probably be secretary and head of the examining board. Alfred Poole, chauffeur for Lawrence Waterbury; E. E. Hawley and Fred Rankin are others who are prominent in the organization at this stage.

The plan on which the few have gone ahead is one that seems likely to meet with the approval of the Automobile Club of America and to offer a partial solution of the chauffeur problem.

According to their own declaration, the men are anxious to have the approval of the Automobile Club and to grade themselves, so that the club ticket, stating that a man is a first, second, third or fourth grade member, will be recognized as a certificate of a certain degree of proficiency. If the Automobile Club co-operates and the chauffeurs are able to go ahead as planned the organization will be in effect the school for chauffeurs, which the Automobile Club and the National Association of Automobile Manufacturers have wanted to see established.

The action forming this incorporated body was taken before the time fixed for the second meeting of those who prepared to form a club. About thirty of those not "on the inside" went to the mobile station on Wednesday of last week. Most of them were operators of electric cars. Joseph Kane, who was elected temporary chairman, called the meeting to order. Then it was learned that not one of the committee of five appointed last week to draw up a constitution and bylaws was present.

Next it was learned that the five, all gasolene car men, had joined some others in forming a body that would exclude the electric and steam carriage operators. The meeting broke up informally with a great deal of bitter talk about the "throw down" and the impossibility of the "select few" going ahead alone.

The chauffeurs are now waiting for their articles of incorporation to come from Albany and meanwhile the leading spirits in the movement are perfecting their plans.

It has been decided to admit only the

operators of gasolene cars. As one of the leaders explained:

"There are few chauffeurs hired for private electric rigs. Most of them operate on public cabs. There are few chauffeurs for private steam vehicles, because most steam automobiles are runabouts. We finally concluded to organize as an association of chauffeurs of gasolene automobiles, and our charter will be so drawn, and it will enable us to do business as an employment agency."

This same man defined the attitude of the organizers toward the National Association of Automobile Manufacturers by saying:

"A manufacturer has talked to us and tried to tell us that we must make it a condition of membership not to accept a commission. That is a separate question from forming a club with members graded according to ability and one that we will settle with the dealers. I see no reason why we should deal with the manufacturers at all. They are not the employers. The members of the Automobile Club are the men whose indorsement we want. We shall seek the approval of the Automobile Club of America and of the American Automobile Association for our system of grading and rating members. The question of tips and commissions is one that can be dealt with later. As I have said, it lies between the men and the garages to settle that. If any one attempts to introduce it at the beginning of our formation it is going to make trouble."

### Haynes-Appersons in New York.

Hereafter the Haynes-Apperson Co. will have direct representation in New York. The Brooklyn Automobile Co., which has for some time looked after the Kokomo concern's interests in Brooklyn, has decided to cross the river and establish itself in this city as well. It will, consequently, open a salesroom at No. 66 West Forty-third street, and will, of course, give prominence to the Haynes-Apperson cars.

It is also announced that the Brooklyn Auto Co. has acquired the effects of the Long Island Motor Co., Hanson Place, Brooklyn. L. R. Adams, who was the moving spirit in the latter concern, now has an interest in the Brooklyn company.

### Exports are Still Climbing.

During February the exports of automobiles and parts showed a marked increase, the figures being \$63,224, as against \$34,500 for February, 1902. For the eight months of the fiscal year a gratifying gain was also recorded. The value of the goods sent abroad during the eight months ending February 28 was \$666,223, as against only \$429,182 for the same period of the previous year.

### To Sell Darracqs in Chicago.

J. B. McKeague has opened an automobile salesroom at 5,024 Wabash Ave., Chicago. The American Darracq Automobile Co. has arranged with him to handle the full line of Darracq cars.

## NEW YORK DEALERS UNITE

### Form an Association to Deal With Chauffeur Question and Rates.

Another of the steps suggested by The Motor World recently when it threshed out the confused chauffeur question in New York City has been taken. Fourteen representative dealers of the metropolis met on Tuesday and agreed to organize a local association. The meeting was held at 7 East Forty-second street. The call for the meeting was sent out by Percy Owen of the Winton Motor Carriage Co. and George B. Adams of the International Motor Car Co. Mr. Adams presided, and Harry Unwin, secretary of the N. A. A. M., kept the minutes. The chauffeur situation was thoroughly discussed; also the matter of making uniform storage charges by the number of square feet of room occupied; of regulating repair prices, and of endeavoring to have the stations better clustered in certain localities. The agreement to organize having been signed by all, a committee was appointed to draw up a constitution and by-laws, and report at a meeting to be held next Tuesday. The committee is: Percy Owen, E. B. Gallaher and John F. Plummer, Jr.

### Moore Quits and Sells out.

As was forecasted by the Motor World last week, the C. J. Moore Mfg. Co., Westfield, Mass., has decided to wind up its affairs. The machinery of the plans has been sold to a New York machine commission house, and will be shipped away this week. By the time the finished automobiles and the tools of the establishment are sold it is expected that the stockholders will realize a substantial dividend on their investment. The remaining fixtures and automobiles will probably be sold by April 1.

Ex-President Moore has gone to Warren, Ohio, where he has made a connection.

### Eames Goes With Federal Company.

Lieutenant H. H. Eames has connected himself with the Federal Mfg. Co., being in charge of its automobile department. He will, however, for the present, at least, continue to look after the sale of Westinghouse motors. Before going with the latter concern Lieutenant Eames was an officer of the Electric Vehicle Co.

### Show in Milwaukee.

Still another local show is projected. Milwaukee, Wis., is to be the venue, and the first week in May the date. The Milwaukee Automobile Club is back of it, and the Exposition building and the fair grounds are suggested for the meeting place.

### Fire Destroys Tire Factory.

Fire attacked and completely destroyed the plant of the India Rubber Co., Akron, Ohio, last week. The concern made the Wheeler, a solid, wired tire for automobiles.



# A LIVE QUESTION Get Your Money's Worth

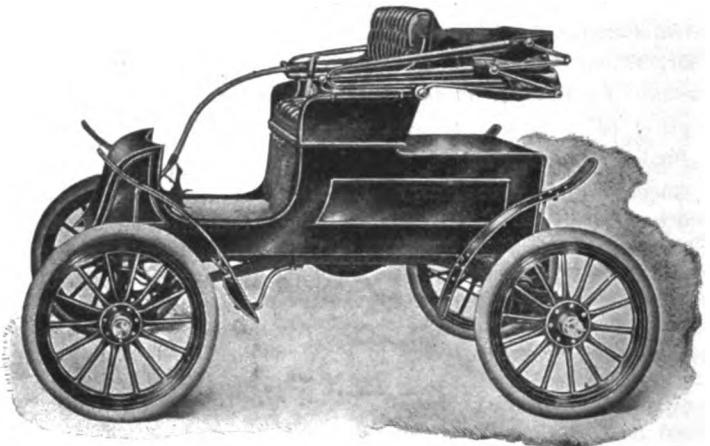
This man got his. He  
bought a

## Northern

and has just had his first  
ride in it.

If YOU are going to buy a Runabout do as  
he did and take no chances.

In it's class the Northern stands supreme.



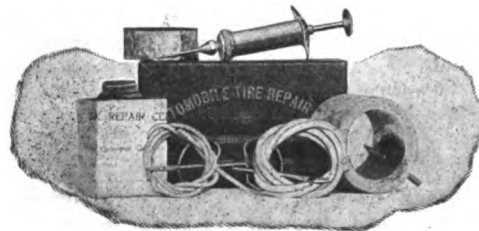
### NORTHERN MFG. COMPANY, Detroit, Mich.

AGENTS: { HOMAN & SCHULZ, 100th St. and Broadway, also 38th St. and Broadway, New York, N. Y. ALVAN T. FULLER, 243 Columbus Ave., Boston, Mass.  
P. DESMARAIS & CO., Bristol, Conn. BANKER BROTHERS COMPANY, Philadelphia, Pa. R. V. CONNERAT, Savannah, Ga.  
OHIO MOTOR CAR CO., 117 Huron St., Cleveland, Ohio. NATIONAL AUTOMOBILE & MANUFACTURERS CO., 26 Fremont St., San Francisco, Cal.  
FRANK P. ILLSLEY, 284 Wabash Avenue, Chicago, Ill. MOTOR CAR CO. of N. J. Newark, N. J.

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The FISK contains a new method of repairing a single tube tire  
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52 State St.

SYRACUSE,  
423 So. Clinton St.

BUFFALO,  
28 W. Genesee St.

DETROIT,  
284 Jefferson Ave.

SAN FRANCISCO,  
114 Second St.



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NEW YORK, APRIL 2, 1903.

### Selden Patent as a Safeguard.

The discovery of a new gold field is invariably followed by a wild rush of all sorts, ages and conditions of men to the spot. The desire to find "easy money" is widespread and contagious.

Occasionally gold mines are developed in the industrial field and the rush to "work" it is but little less frantic than in the case of the precious metal. Every man in a declining business or idle factory is quick to see the opening and to throw himself or his factory into it. Bicycle manufacture was the most recent instance of the sort. It was quickly overworked and the wrecks that strewed the field, as a natural result, were so many and so complete that the debris has not yet been completely cleared away. A deserving industry was crippled in a night.

It is not to be denied that the automobile industry is also viewed in the nature of the newest industrial gold mine. The "millions that are in it" or supposed to

be in it have attracted and are attracting shoals of hungry promoters, speculators and get rich quick "sharks," and as the business progresses and the fact gets abroad that the demand is not equal to the supply, the number is likely to increase rather than diminish.

If, therefore, a barrier or a warning hand can be raised, that will stay the onrush of this hungry horde, who will say that the industry will not be immensely safeguarded and benefited?

Regardless of all other considerations, it seems to us that the Association of Licensed Automobile Manufacturers deserves warm welcome because of the abundant promise that it holds in this direction. If membership is not placed within the reach of any and all who are able to pay the "initiation fee" of \$3,500, then the association, secure in the possession of the Selden patent and with an ample fund for offence and defence, is positioned as nothing else could be positioned to raise the barrier and lift the hand that will warn "poachers" off the automobile preserves and keep them safely guarded. If before licenses are granted, prospective members are made to abundantly prove that they are not mere promoters, speculators, shysters or "sharks," then the mischief and wreckage that so hurt the bicycle trade can be and, we believe, will be avoided.

If such assurances are given we cannot see that it will profit any reputable manufacturer to remain outside the fold, whatever may be his opinion of the patent itself. As we see it the ends which the association may be made serve are so prodigiously beneficial that it is the better part of wisdom and valor—also it is cheaper—to join than to fight.

### Is Still the Model Law.

Any tinkering with the model Connecticut automobile law is unnecessary and regrettable. But if it had to be changed—in deference to the frantic adjurations of Representative Warren and men of that ilk—the proposed amendments, reproduced in another column, are as harmless as could reasonably have been expected.

In its proposed new form the Connecticut law still stands head and shoulders in advance of that on the statute books of any other State. The much vaunted New Jersey law—the "most perfect in existence," as an overzealous advocate has characterized it—in cumbersomeness and viciousness,

miles and miles removed from it. As was Hyperion to a satyr, so is the Connecticut measure to the New Jersey abomination.

Even our own proposed New York law is innocuous beside the one from the State of pines, sand and mosquitoes. It is severe in places, but infinitely less drastic than that of our sister State. There is some chance of its being lived up to, and the motorist does not have to go always provided with a \$50 bill with which to placate the minion of the law and vindicate its majesty.

There can be no two opinions regarding the matter. Connecticut takes first place, with New York second and New Jersey a bad third in the list of States passing or about to pass automobile laws.

### Longer Wheel Bases.

Almost since the building of the first automobile the lengthening of wheel bases has gone on; and the end is not yet. Six, seven, eight and even nine foot bases are commonly met with, and no outcry is raised in opposition to them, no reaction sets in.

Only a short time ago it was reported that a new foreign racing car would have a fifteen foot wheel base. This is now denied, twelve feet being given as the correct length between wheel centres. The first figure was startling; the last will cause little or no surprise, for it is only slightly in excess of that made familiar in former practice. Higher speed than ever before attained is demanded in this year's racing cars; and it is a matter of common knowledge that only by the use of longer wheel bases could this be attained. Hence the increase noted.

Extremes of this nature belong solely to the racing car. But wheel bases on road vehicles always reflect any movement of the kind. The present standards followed the fashion set by speed cars. Even the latter started with the "dumpy" underframes that then marked and still are peculiar to horse drawn vehicles. But a double influence was at work to effect a change: Speeds were greater and demanded more space between the front and rear wheels; and to counteract the weakening effect of such body lengthening it was the easiest matter in the world to strengthen by adding weight and then use more powerful engines or motors to counterbalance the increased weight.

The result was a decided and all around betterment of the motor vehicle. It could travel faster, but whether it did or not, it became a vastly more comfortable vehicle to ride in. As this became more and more ap-

parent the movement grew until it became general. Even light and low powered cars, designed for and capable of very moderate speeds, were lengthened, and as a result participated in the general improvement.

At the present time we are accustomed to look upon wheel bases as having settled upon a standard, or rather a number of them, depending upon type, weight and power. But we have no assurance that the movement has really run its course. There are plenty of cars that are longer of base this year than in 1902, although otherwise little changed. And it is by no means a foregone conclusion that 1904 will not witness still other changes along the same lines.

### Need of Diplomacy.

As was pointed out last week, the situation with regard to the regulation of the chauffeurs presents an unusual opportunity for an effective and salutary co-operation between the operators and the owners as represented by the club. It has become very plain, however, that the preliminary steps toward arranging such a co-operation must be conducted with consummate tact.

The chauffeurs have taken offense at the attempt of a manufacturer to dictate to them concerning the acceptance of commissions. They say that they do not look to the manufacturers, but to the owners for support; that the question of commissions is one to be settled between themselves and the storage station and repair men. Perhaps they are headstrong in this, but there seems to be some logic in it. At any rate, it can be seen that an intrusion of the question of commissions and fees at the outset of negotiations would be undiplomatic. It would be apt to upset all the progress that has been made and end the negotiations.

The men are willing and anxious to organize and arrange their ratings in a way satisfactory to the club. They undoubtedly are willing to have the grade certificates issued by them vided by a representative of the club. Without the recognition of the club the organization of the men cannot amount to much. With the indorsement of the club and the A. A. A. to its ratings, it could become a flourishing national body, that under guidance by the club would be a helpful institution to automobilists generally. It would be a pity to have the opportunity for instituting such a condition of things spoiled by precipitate haste to bind the men down to all of the ideas of the club men and manufacturers.

Diplomacy is needed. The first thing to be done is to get the men organized in such a way that there will be co-operation between them and the club, and in such a way that they will realize the importance of the club's support. Until this is accomplished other issues should be temporized. The commission matter should be for the time set aside as a separate question. No good can be done by attempting to force the men, but much can be done by going slowly. If an attempt to make the men agree to this and that is made, the result will be that everything will fly in the air and nothing be accomplished. The co-operation should be first established. Later it will be possible to bring up the other matters, and then the bond of interest being existent, the club would have the right to have something to say, and with the power to revoke its recognition of the chauffeur's association, it could hope to achieve what it cannot now while there is a chaotic condition between owners, dealers and chauffeurs. Perhaps, however, there is some sound, practical business sense in the declaration of the men that the question of commissions is between them and the dealers, and now that the latter are to organize, they should be capable of regulating such matters. Diplomacy is needed. The situation has some promise in it, and in making treaties a concessional spirit is essential on both sides.

### Demand for Commercial Vehicle.

It would be no easy task to find a more widespread and urgent demand than exists at the present time for self-propelled commercial vehicles. From all over the world come appeals for them. Apparently the desire to supplant the horse is general, frequently insistent, and nothing could bring out more strongly his inefficiency and unsatisfactoriness. Humanity cries aloud for release from the thralldom, and turns to the motor vehicle as the Moses that is to lead it out of the land of bondage.

To the question whether such vehicles are sufficiently developed and, above all, procurable, the approaching commercial vehicle test will do much to give an answer. Its timeliness is self-evident. The pleasure automobile looms large in the public mind; its mates, the delivery wagon and the passenger bus, will at once occupy a similar position when it is demonstrated that they are ready. Every consideration urges the maker to place himself in a position to supply the demand that already exists, as well as to

prepare for that vastly greater one that will tread close on its heels so soon as it is made plain that it will not be compelled to go unsatisfied.

In our largest cities and towns, no less than in the rural sections, and in the remotest countries of the earth, the need exists. It only remains to supply it, and to that task every effort should be devoted.

### Onesideness of the Crusade.

If the present crusade against automobiles should result in a reform of all road evils and abuses we could regard it with considerably more cheerfulness than we do. Such is not likely to be the outcome, however. It is the offending motor vehicle that is aimed at, not the horse-drawn one; and the motorists' peril is a matter that is not worth much consideration. How much better it would be if all offenders were pursued and punished! The driver who goes to sleep and gets on the wrong side of the road, without a light or other sign to indicate his presence; the country, town or city authorities who permit obstructions or excavations to exist, unguarded by a warning signal; the railroad company which, to save a few pennies, maintains a nuisance in the shape of a lowered gate without a red lantern to mark it—these are some of the conspicuous offenders who should be brought up with a round turn. Action against them would benefit all road users.

Such an innovation as fitting watering troughs with appliances for watering automobiles is distinctly commendable. Hartford, Conn., has decided to try it, equipping three troughs as a starter. The cost is nominal, being only \$25 for the three. Thus do coming events cast their shadow before. The sight of a horse and an automobile ranged alongside of a trough, each taking in the precious liquid that enables it to perform its work, will soon cease to be an unusual one.

Wheels of large diameter and tires of generous size are the winning combination; even the small cars are undergoing a change of this nature. More comfortable cars result, as a matter of course.

As well expect an engine to run without gasoline or a tire without air as to look for good work from a car that is not properly cared for.



## MANY RECORDS FALL

### Ormond-Daytona Beach Proves Fast, but Fournier's Mile Time Still Stands.

Whatever expectations of a huge success may have been formed of the motor races in Florida last week were destined to disap-



THE OLDSMOBILE THAT DISTINGUISHED ITSELF.

pointment. Neither in the matter of performances nor of attendance did the meet come up to expectations. But in spite of this, it was in both respects very far removed from failure. Exceedingly creditable work was done by the participating vehicles, and it was demonstrated that a function of the sort not only filled a certain want, but could be made an unequivocal and permanent success. Consequently, it was promptly decided to continue the events as a fixture, and a permanent organization was effected at the conclusion of the meeting under the name of the Florida East Coast Automobile Association.

The beach bordering the broad Atlantic between Daytona and Ormond presents many advantages. It is level, smooth and hard. These facts account for the remarkably good time made on it last week. But it has its drawbacks also. To these were due the absence of phenomenal times, if those accomplished by the Indian motor bicycle and the Thomas Oldsmobile be adjudged non-phenomenal. The beach is hard, but it is dead also, being absolutely devoid of spring; it is marred in spots by uneven places; and low tide and a hot sun are necessary if the best performances are to be made. On Saturday in particular the latter qualities were lacking, and undoubtedly prevented Winton from eclipsing the Fournier record of 51 4-5.

The net result of the three days' racing was a slaughter of the then existing records for light gasoline cars; steam cars and motor cycles, and a very close approach to the still standing Fournier mile record of 51 4-5, made in Brooklyn in 1901.

Thursday's trials were merely productive of good augury, Winton in his Bullet covering a mile in 56, Hedstrom on his Indian motor cycle riding the same distance in

1.09, and Thomas in an Oldsmobile putting up a new record of 1.06. Hathaway also made a cut in the steam figures, covering a mile in 1.28. Good as these times were, they were disappointing. It was believed that the Daytona end of the beach would prove faster, but the second day's racing showed that the contrary was the case. In repeated trials against time both Winton and Thomas failed

cessful in his trial, making a new motor cycle record of 1.03 1-5, while Thomas failed to equal his former mark by 3-5 of a second.

To a Motor World representative who saw him in this city on Tuesday Mr. Winton stated that the Bullet was equipped with several devices that are to be used on the cup racers, and one object of the trials was to thoroughly test them. They worked perfectly, he said, and he was more than satisfied.

The summary follows:

#### THURSDAY.

One mile against time—Alex. Winton, Winton "Bullet," time, 56. American record 51 4-5, held by Henry Fournier.

One mile against time, motorcycles—Oscar Hedstrom, Indian Motor Bicycle; time, 1.06, beating former record of 1.10 2-5.

One mile against time, gasoline cars under 1,000 lbs.—H. T. Thomas, Oldsmobile; time, 1.06, beating previous record of 1.35 3-5.

One mile against time, steam cars—J. F. Hathaway, Stanley; time, 1.28, beating previous record of 1.53.

One mile race, gasoline cars under 1,000 lbs.—Won by Raymond Boothroyd, New York, Oldsmobile; time, 1.36.

#### FRIDAY.

Daytona Handicap, five miles; open to all vehicles—Won by Oscar Hedstrom, Springfield, Mass., Indian motor bicycle, handicap 1.05, actual time 5.37; H. T. Thomas, Lansing, Mich., Oldsmobile, handicap .50, actual time 6.05, second; Raymond Boothroyd, New York City, Oldsmobile runabout, handicap 4.15, actual time 10.45, third; Alex. Winton, scratch, actual time 7.23, fourth.

Motor bicycle championship of Florida, one mile—Won by W. W. Austin, Daytona; D. P. Merrill, Smyrna, second; time 1.36.



TIMER AT FINISH AWAITING THE SIGNAL.

dashing style in 5.27—figures much in advance of any yet recorded by a motor cycle.

On Saturday the Ormond end of the beach was tried again, and more record breaking was accomplished. Winton cut 3 4-5 seconds off his time of the first day, the new figure being 52 1-5, or just 2-5 outside of Fournier's record. At ten miles he also scored, covering the distance in 10.26, lowering the former record of 10.50. Hedstrom was again suc-

#### SATURDAY.

One mile against time—Alex. Winton, time 52 1-5.

Ten miles against time—Alex. Winton, time 10.26, beating previous American record of 10.50.

One mile against time, motor cycles—Oscar Hedstrom, time 1.03 1-5, world's record.

One kilometer against time, gasoline cars under 1,000 lbs.—H. T. Thomas, Oldsmobile, time 41 4-5, beating previous record of 59 seconds.

# Commentary

Pardon me if under the influence of this really spring weather I burst into poetry with:

Is there a town so poor and dead  
That ne'er unto itself has said,  
"I'll have an auto show?"

\*\*\*

Writing about spring reminds me that there is always one infallible way to tell when it is really here. Consulting almanacs, weather prophets, ground hogs and the like is all very well, so far as those consulted and their abilities go, but when you want a really copper rivetted, cast iron certainty as to spring's arrival watch the daily papers for the revival of the story of the private automobile road certain always unnamed Long Island millionaires are going to build so they may scorch to their heart's content unmindful of the hampering hayseed of the public highway. Earlier than usual this hardy annual blossomed forth in the New York dailies and is now reappearing in the papers throughout the country, as it will continue to do until Thanksgiving Day or even later. Yes, spring is here. After this proof of it none may doubt, and you can feel no hesitancy in bestowing an unsuppressed interest in lighter garments and other pneumatic productions.

\*\*\*

Without a doubt it is highly immoral to swear, but, believe me, there is something wrong with the man who does not want to do so sooner or later in his career as an automobilist.

\*\*\*

Why shouldn't the automobilists emulate the example of the coaching devotees and hold a spring parade through the park and up the Riverside Drive? I can remember when the annual coaching affair of this kind attracted thousands of onlookers and went far toward winning the public favor, which had first been denied the new carriage because it was thought to be purely an attempt to imitate English fashions, which were not then as popular with the masses as they now are. When, however, the public saw the owners of the four-in-hands turn out for the public's inspection, the change which came about was marvellous, and while it may have gone to jeer, the public remained to cheer, and forthwith the four in hand was an accepted thing. It would be exceedingly easy for the automobile club to have an affair of this kind, and if it was kept a purely club event it could be made a thoroughly representative exhibit of all that was finest and best in the shape of automobiles. The benefit which would result from the establishment of some annual affair of this kind would be something surprising to those who have not given the matter any consideration. The Automobile Club has done so much

that has really been for the best interest of the motor vehicle that it seems very little to ask them to take hold of anything so easily promoted as this parade would be, and I would therefore like to see them give the idea consideration.

\*\*\*

If the unexpected always happens with a motor, and we always expect the unexpected to happen, what'll happen?

\*\*\*

Please don't think I am a Jeremiah, because really I'm not; but let me say just a few words to all of you who are planning to buy an automobile. After you have consulted all of your friends, read all the literature bearing on the subject, and have in every other way made yourself the living receptacle of the consolidated automobile wisdom of the universe, make your choice of a vehicle and hope for the best. If, as it sometimes happens, you get the worst you will at least have the satisfaction of knowing that you had a happy time getting there. That's all, and it isn't so bad, either.

\*\*\*

That the modern imitator of the horse thief should be the automobile one is but natural, though I must say that the newcomer has a lot to learn from his predecessor when he steals a \$1,200 automobile in New York and pawns it in Yonkers. This was what happened, and aside from the utter foolishness of the whole performance, any man, even a thief, who would take an automobile to Yonkers even to pawn it, should be hung.

\*\*\*

Naturally it was an Irishman who whispered, "More power to ye," as his motor gave very decided evidence of its disinclination or inability to carry itself and its owner up an incline.

\*\*\*

We might just as well prepare to take our medicine. Regardless of any need or any benefit which can come to any one except the politicians, the users of automobiles must follow in the footsteps of the horseshoers and the corn "doctors" and appear before a committee and pay for the committee's declaring they are proficient enough to be allowed to be placed in control of an automobile unaccompanied by a guardian or a wet nurse. The gentlemen who make our laws at Albany and in the City Hall have both decided on this licensing outrage, at the instigation of a yellow journal and a few well meaning but non-thinking automobilists. Of course, the whole thing is a strike, and is but an extension of the idea of government by and for a political committee. No one can claim that those automobilists who sin most against the canons of decency and the law do so because they are incompetent. The very opposite is true; it is because they are most competent that they proceed at a speed and disregard for the rights and lives of others that none but an expert would or could. How will licensing

help this condition of affairs? Of course, it will not, nor was it ever expected to, but it will provide "graft" for the politicians out of the pockets of the automobilists, whom all politicians regard as only fit to rob and to abuse. As a sample of what automobilists are coming to in this matter I might call attention to the fact that only last week a delegation of union engineers called upon Mayor Low to protest against the way all applicants for a license to run a boiler in this city were held up. According to the protesting committee, it is practically impossible to get a license without "giving up" liberally to the examiners. Now if a labor union, with all its power and pull, cannot protect its members from being shaken down when licenses are sought, what chance do you think an automobilist, minus organization, pull or anything else but cash, will have?

\*\*\*

It won't do the least bit of good to say so; nevertheless, it is a fact that within reasonable limits the faster an automobile is sent past a horse the better, since the animal, seeing less of it, has consequently less time in which to work up his agitation. If horsemen realized the safety which results from a rapidly passing motor vehicle, perhaps they would not be so insistent as they now are upon the limitation of the speed of the vehicle to something slower than a dog trot.

\*\*\*

'Tis a good thing there is a long "close" season between shows. As it is, we are pretty sure to have a superabundance of them before the curtain is rung down on the last one. The Washington function will, we trust, be the final one, and it will provide an agreeable variety, in that its outdoor features will play an important part in the grand whole.

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They have just dug up King Thothme's chariot over in Egypt, and the diggers up value the conveyance dug up at \$25,000. See the disadvantage of being born ahead of the times. Just think what a big, red racing car old King Thot could have got for that much money had he only waited until now.

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There must be something wrong with Mr. John Carter Brown Woods, of Providence, R. I., who has actually brought suit for \$10,000 against a railroad company for running into and demolishing Mr. J. C. B. Woods's automobile. You couldn't find a jury in this country who would render a verdict in Mr. Brown's favor. Why, the very idea of an automobile or the owner thereof having any rights of any kind is a thing so foreign to the belief of the ordinary citizen that it seems to me the height of absurdity to try and get twelve of them to give a verdict to the contrary, no matter what the evidence brought before them might be.

THE COMMENTATOR.

## BEST OF ALL LAWS RETAINED

### Connecticut Legislature Likely to Pass Bill Slightly Amending Present Measure.

Within the week the Connecticut automobile situation has undergone a marked change. Compromise of a sort has carried the day, and in place of the absurd Warren and other anti-automobile measures two reasonable substitute bills have been introduced and are likely to be passed without opposition worthy of the name.

One of the bills relates solely to the registering, numbering and lettering of automobiles. It provides for the registering with the Secretary of State, upon the payment of a fee of \$1, of every automobile owned in the State. Upon receipt of the name and address of the owner, with description of the car, a certificate shall be issued, together with a number, and the latter, preceded by the letter "C," shall be attached to the back of the car. No other formalities are necessary, and the act takes effect two months after its passage.

Cars run by non-residents are exempted from the provisions of the bill, provided they have conformed to the provisions of a similar law in their own State.

The second measure amends the existing automobile law. The present speeds of 12 and 15 miles per hour are retained, as are all its other provisions. The changes consist of adding an imprisonment penalty for violation of the law; of prohibiting driving at a dangerous rate of speed, and of making it obligatory to slow or stop on meeting restive or frightened horse drawn vehicles. The new measure in full is as follows, the changes from the present law being indicated by the bracketed portions:

No motor vehicle shall be run on any highway or public place [at a rate of speed dangerous to life and property; nor on any highway or public place] outside the limits of a city at a rate of speed to exceed fifteen miles an hour; nor on any highway or public place within the limits of any city at a rate of speed to exceed twelve miles an hour. Upon approaching a crossing of intersecting streets or roads, the person having charge of the power of such vehicle shall have such vehicle under control, and shall reduce the speed of such vehicle until said crossing of such street or road shall have been passed. [Upon meeting or passing any vehicle drawn by a horse, the person having charge of the power of such motor vehicle shall reduce its speed, and if the horse drawing said vehicle appears to be frightened, the person in charge of said motor vehicle shall cause said motor vehicle to come to a stop.] Wherever the term "motor vehicle" is used in this section, it shall include all vehicles propelled by any power other than muscular, excepting the cars of electric and steam railways and other motor vehicles running only upon rails or tracks. No city, town, or borough shall have any power to make any ordinance, bylaw or resolution respecting the speed of motor vehicles, and no ordinance, bylaw or resolution heretofore or hereafter made by any city, town or borough in respect

to motor vehicles shall have any force or effect. The mayor of any city, the selectmen of any town, or the warden of any borough, may, upon any special occasion, or whenever in their judgment it may be deemed advisable, grant permits to any person or persons or to the public to run such motor vehicles during a specified time or until such permit is revoked, upon specified portions of the public ways or highways of such city, town or borough at any rate of speed, and may annex such other reasonable conditions to such permits as they may deem proper. Any person violating any of the provisions of this section shall be fined not more than two hundred dollars [or imprisoned not more than thirty days, or both.]

The second measure, relating to the registration of automobiles, is as follows:

Section 1. No automobile or motor vehicle shall be used or operated upon the public highways of this State until the owner thereof has complied with the requirements of sections two, four and five of this act.

Sec. 2. The owner of every automobile or motor vehicle shall file in the office of the Secretary of the State a statement of his name and address, together with a brief description of every such vehicle owned by him, and shall obtain from said Secretary a numbered certificate for each of such vehicles, which certificate shall state the name of the owner of such vehicle and that he has registered in accordance with the provisions of this act.

Sec. 3. The Secretary of the State shall keep a record of all such statements and of all certificates issued by him, which record shall be open to the inspection of any interested party at all reasonable times.

Sec. 4. Every such automobile or motor vehicle shall have the initial letter of this State and the number of the certificate issued for such vehicle displayed upon the back thereof in a conspicuous place and manner, the letter and figures of such name and number respectively to be at least three inches high.

Sec. 5. A fee of one dollar shall be paid to the Secretary of the State for each certificate issued by him in accordance with the provisions of section two of this act.

Sec. 6. No license, permit or registration shall be required of the owner or operator of any automobile or motor vehicle as a condition of operating such vehicle, except in accordance with the provisions of this act, nor shall any such vehicle be required to be marked in any way except in accordance with the provisions of this act. But nothing in this section contained shall apply to such automobiles or motor vehicles as are offered to the general public for hire.

Sec. 7. The provisions of sections one, two, four and five of this act shall not apply to such automobiles or motor vehicle as are owned by manufacturers of or dealers in such vehicles and are not employed in the private business or for the private use of such manufacturers or dealers.

Sec. 8. The provisions of this act shall not apply to automobiles or motor vehicles or to the owners thereof, provided, that such owners shall have complied with the law of any other State or territory of the United States which shall have in effect a law similar in all respects to sections one, two, three, four, six, seven and eight of this act, except that in such event such owners shall display the initial letter of such State or Territory in place of the initial letter of this State.

Sec. 9. The penalty for violating any of the provisions of this act shall not be less than five nor more than twenty-five dollars.

Sec. 10. This act shall take effect two months after its passage.

## AMENDED DOUGHTY MEASURE

### Is Result of Compromise in This State—Many Good Features are Retained.

The conference at Albany on Tuesday of last week resulted in a very decided clearing of the automobile atmosphere. An agreement was reached between the Automobile Club of America, as represented by President Shattuck, and the anti-automobile forces, with Assemblyman Doughty at their head. As a result the Doughty bill, introduced in the Assembly on March 11, will receive united support and is slated for an early passage.

The Doughty bill is a lengthy one, and burdensome in some of its provisions; yet on the whole it is not a bad measure, nor, the present state of the public mind considered, one that could lightly be rejected by motorists. It is a vast improvement over the malodorous Cocks law now on the statute books, and even possesses some points of superiority over the original Doughty bill—the Liberty bill, as it is popularly termed. Indeed, the latter is used as a model, and the changes made in it both improve and hurt it.

The greatest merit of the new measure is found in its speed regulations. These are eight, fifteen and twenty miles an hour in the cities and towns, in the non-built up portions of the cities and towns, and in the country, respectively. The definitions are simple and precise. "Non-built up" means where houses are 100 feet apart. Upon passing other vehicles or pedestrians an eight mile speed is required; where schools or churches exist it must not exceed ten miles; over bridges, four miles; eight miles within half a mile of a postoffice, provided signs are posted. Boards of supervisors are permitted to suspend the limits so as to allow speed contests.

The present registration system is changed so as to provide for the registration of each vehicle owned; the fee remains \$1. Each person desiring to or employed to operate vehicles must also be registered. Certificates and numbers are issued by the Secretary of State.

In the matter of signalling the only change is the insertion of the clause, "and upon request shall cause the engine of such automobile to cease running." This interpolation is a startling one, however, and has already come in for criticism.

The penalties imposed for violations of the bill are severe, unduly so in most cases. It is made a misdemeanor to run a car without being registered, or to refuse to show a certificate to the proper official. For violation of the speed clauses the first offence is punished by suspension for two weeks, one month for the second, revocation for the third; the fourth time the offender is barred from receiving a certificate.

Instead of the \$25 fine at present imposed

the first violation is punished by \$50 fine, the second by \$50 to \$100 or thirty days' imprisonment or both, the third and subsequent offences by imprisonment, or by imprisonment not exceeding thirty days or by a fine of not less than \$100 nor exceeding \$250.

The proposed law is as follows:

**Section 163.** The commissioners, trustees or other authorities having charge or control of any highway, public street, parkway, driveway or place, shall have no power or authority to pass, enforce or maintain any ordinance, rule or regulation by which any person using a bicycle or tricycle, an automobile or motor vehicle, whether the same be propelled by steam, gasoline, electricity or other source of energy, shall be excluded or prohibited from the free use of any highway, public street, avenue, roadway, driveway, park, parkway or place, at any time when the same is open to the free use of persons having and using other pleasure carriages, except upon such driveway, speedway or road as has been or may be expressly set apart by law for the exclusive use of horses and light carriages.

The board of supervisors of any county may adopt ordinances, not inconsistent herewith, regulating the speed of automobiles or motor vehicles on the county roads, highways or streets of such county, outside the limits of cities. No ordinance, rule or regulation adopted by the authorities of any city, in pursuance of this section, or of any other law, shall require an automobile or motor vehicle to travel at a slower rate than eight miles per hour within the closely built up portions of such city, nor at a slower rate of speed than fifteen miles per hour where the houses in such city upon any highway are more than one hundred feet apart. No ordinance, rule or regulation adopted by the authorities of any municipality, in pursuance of this section, or of any other law, shall require an automobile or motor vehicle to travel at a slower rate of speed than twenty miles per hour within any town or village outside of the territory within which the speed is restricted by the latter part of this section.

An ordinance adopted by a board of supervisors, in pursuance of this section, regulating the rate of speed of automobiles or motor vehicles on the highways or streets of such county outside of cities, shall supersede any such ordinance in such county adopted by the authorities of a town or village. But nothing herein shall prevent the passage, enforcement or maintenance of any regulation, ordinance or rule, regulating the use of bicycles or tricycles in highways, public streets, driveways, parkways and places, or the regulation of the speed of carriages, vehicles, engines, automobiles or other motor vehicles in public parks and upon parkways and driveways in the city of New York, under the exclusive jurisdiction and control of the Department of Parks of said city, nor prevent any such commissioners, trustees or other authorities in any other city from regulating the speed of any vehicles herein described in such manner as to limit and determine the proper rate of speed with which such vehicles may be propelled, nor in such manner as to require, direct or prohibit the use of bells, lamps and other appurtenances, nor to prohibit the use of any vehicle upon that part of the highway, street or parkway commonly known as the footpath or sidewalk.

No automobile or motor vehicle propelled by steam, gasoline, electricity or other source of energy shall pass a person driving a horse or horses, or other domestic animal, or foot passengers walking in the roadway of the highway, or cross an intersecting

main highway, at a greater rate of speed than eight miles per hour, nor pass a public school, on the days when school is held, between the hours of 8 o'clock ante meridian and 4 o'clock post meridian, or pass a building of public worship on the Sabbath day during the usual hours of service at a greater rate of speed than ten miles per hour, or cross a dam or causeway where the travelled portion of the roadbed is less than twenty feet wide at a greater rate of speed than four miles per hour. No automobile or motor vehicle propelled by steam, gasoline, electricity or other source of energy shall run upon any highway of this State within a distance of one-half mile of any postoffice in this State at a greater rate of speed than eight miles per hour, if the authorities having control of the highway or highways within such distance indicate by an appropriate sign on the side of any highway upon which speed is to be regulated that speed is to be reduced to the rate of eight miles per hour. Upon such sign there shall appear clearly the words, "Slow down to eight miles," and also an arrow pointing in the direction where the speed is to be reduced, provided, however, that if the territory beyond the said limit of one-half mile of any postoffice is built up to such an extent that in the judgment of the authorities having control of such highway or highways speed should be reduced beyond such half-mile limit of the postoffice, that then, in such case, the authorities having charge of such highway or highways may erect such signposts at a greater distance than one-half mile of such postoffice and at the limit of such built up portion of the highway, and thereupon no such automobile shall be run within such distance thus established at a rate of speed in excess of eight miles per hour. Nothing herein contained shall be construed as preventing a board of supervisors from setting aside for a given time a road for speed tests to be conducted under proper restrictions.

**Sec. 166.** Registration by owners of automobiles.—Every owner of an automobile or motor vehicle shall, within thirty days after the amendment to this section takes effect, file in the office of the Secretary of State a statement containing his name and address, with a brief description of the character of such vehicle, including the name of the maker and the number of the motor vehicle, and shall pay to the Secretary of State a registration fee of one dollar for each motor vehicle.

The Secretary of State shall number the certificates which he has heretofore issued in the order in which they have been issued, and upon request of the holder of any such certificate shall, without further fee, stamp thereon the number of the same or issue a duplicate showing such number. Every person desiring to operate an automobile as mechanic, employe or for hire shall, within thirty days after the amendment to this section takes effect, file in the office of the Secretary of State a statement giving his name and address, and also a description of the character of the machine which he is enabled to operate, and shall pay to the Secretary of State a registration fee of one dollar. The Secretary of State shall issue to such person an operator's certificate, properly numbered, stating that such person is registered in accordance with this section, and shall cause the name of such person, with the number of his certificate, to be entered in alphabetical order in a book kept for such purpose. Every person acquiring such a certificate shall, at all times, when operating an automobile, carry such certificate with him.

**Sec. 169.** Stop automobile on signal.—Every person driving an automobile or motor vehicle shall, at request or signal, by putting up the hand, from a person driving or riding

a restive horse or horses, or driving domestic animals, cause the automobile to immediately stop and remain stationary, and upon request shall cause the engine of such automobile to cease running, so long as may be necessary to allow said horses or domestic animals to pass. This provision shall apply to automobiles going either in the same or in an opposite direction.

**Sec. 169a.** License or permits for automobiles.—Any person owning or operating an automobile or motor vehicle, whether the motive power of the same be electricity, steam, gasoline or other source of energy, except such as are used for public hacks, trucks or vehicles for hire, shall not be required to obtain any license or permit pursuant to the provisions of any local or municipal resolution or ordinance, or the rules or regulations of any commissioners, trustees, supervisors or other authorities having charge or control of any highway, public street, parkway, driveway or place, or pursuant to the provisions of any municipal charter or any other statute, except as herein contained. Every such automobile or motor vehicle shall have the number of the certificate issued under section one hundred and sixty-six by the Secretary of State placed upon the back thereof in a conspicuous place so as to be plainly visible, the numbers to be Arabic numerals, black on white ground, each not less than three inches in height and each stroke to be of a width not less than half an inch.

A person who shall operate or run any automobile or motor vehicle upon any highway, public street, park, parkway, driveway or place, without a certificate first had and obtained as herein provided or being the holder of such a certificate, shall refuse to exhibit the same on demand to any peace officer, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punishable as provided in section one hundred and sixty-nine-b, and any person who shall violate any of the provisions of this statute, or of any speed ordinance adopted pursuant hereto, upon conviction thereof, shall, in addition to the penalties provided in section one hundred and sixty-nine-b, be further punished for a first offence by a suspension of his right to operate or run an automobile for a period of two weeks, for a second offence by a suspension of his said right for a period of one month, and for a third offence by a revocation of his said right. A person convicted four times of violating a speed ordinance or ordinances shall thereafter be disqualified and barred from receiving a license certificate.

**Sec. 169b.** Penalty.—The violation of any of the provisions of section one hundred and sixty-three or sections one hundred and sixty-six to one hundred and sixty-nine-a, inclusive, or for violating any ordinance, rule or regulation adopted by the authorities of any municipality, or the commissioners, trustees or other authorities of any parkway or driveway, relating to automobiles or motor vehicles, propelled by electricity, steam, gasoline or other source of energy, shall be deemed a misdemeanor punishable by a fine not exceeding fifty dollars for the first offence, and punishable by a fine not less than fifty dollars nor exceeding one hundred dollars, or imprisonment not exceeding thirty days, or both, for a second offence, and punishable by imprisonment, or by imprisonment not exceeding thirty days and by fine not less than one hundred dollars nor exceeding two hundred and fifty dollars for a third or subsequent offence.

**Sec. 6.** All acts or parts of acts regulating the speed of motor vehicles, inconsistent herewith, are hereby repealed.

**Sec. 7.** This act shall take effect immediately.

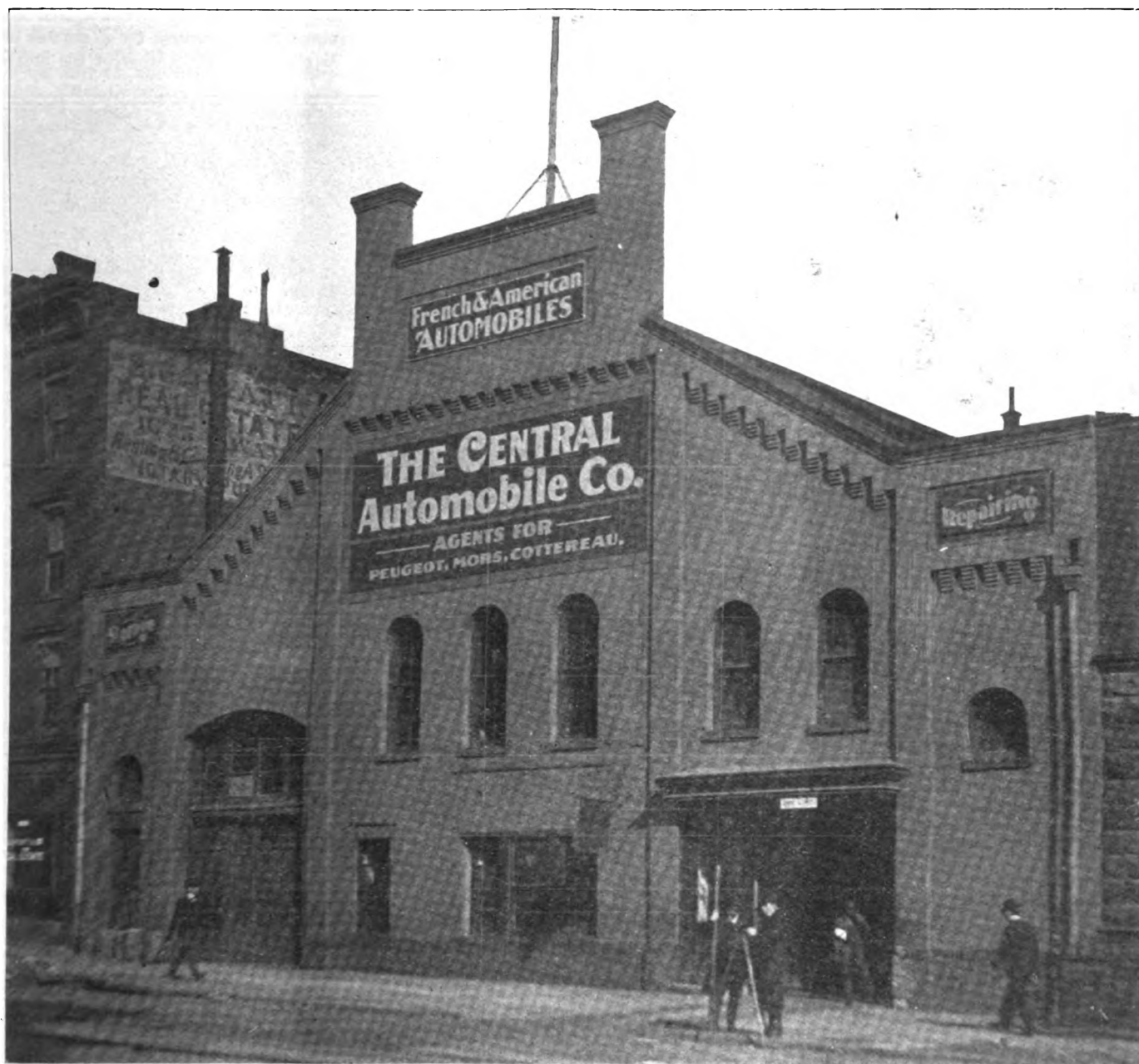


## The Metropolitan Salesrooms and Garages—IV

The one place in New York City where automobilists can get in on the ground floor with their cars, to the number of 200, is at the grand garage of the Central Automobile Co., at No. 1,684 Broadway, between Fifty-second and Fifty-third streets. As few of

should a place made to accommodate artillery, and that is what the structure was built for. Originally it was the home of the 2d Battery, N. G. S. N. Y. Later, in the days of the bicycle craze it was a riding school for the Michaux Club, composed of

The roominess and dryness of the building are great virtues in this place, but they do not overshadow the advantages it possesses through being near the park and being equipped for the highest class of work and storage attention. While the capacity



the garages of the metropolis date back more than two or three years, this is one of the earliest of the city's automobile establishments, as well as one of the most spacious.

Housed in a building built for an armory, this garage has the appearance of occupying a place constructed especially for the purpose. The front has a businesslike look, as

members of the fashionable set. The building extends through the block 180 feet, from Broadway to Seventh avenue, and has a frontage of 80 feet on each of those thoroughfares. It is built of brick and iron and stone, and is almost fireproof. With its great skylighted dome and its floor of solid concrete, without a single pillar, it looks the ideal place for stabling motor cars.

of the great floor is about 200 cars, there are at this writing about 120 there, and these are disposed in a way that facilitates arrival and departure and cleaning work to the utmost. There is a single row of cars about the sides and the rear of the room, and the rest form an oval island in the centre. Between the rows of cars about the walls and the central group is a roadway



big enough for a touring car to be turned about in it. This roadway extends around the centre lot of vehicles, so that it forms a track about fifteen laps to the mile. This permits of cars being handled with the minimum of turning about, as it is easy always to run around the track to the doorway on Broadway. There is no entrance from the Seventh avenue side now.

It is an impressive scene that meets the eye when one stands in the gallery at the front end of the building and looks over the big hall. Gasoline and steam vehicles of every description are to be seen, big imported touring cars, runabouts, broughams, cabs and victorias. Steam vehicles are not

for the electrical and the gasoline cars. G. Combet, an experienced French mechanic, is in charge of the gasoline shop. The shops, together with the rest of the arrangements in "The Central," as it is familiarly known, inspire appreciation of the words of the presiding genius of the place, who once said: "We claim nothing except that we do the very best work in every respect, give the most thorough attention to stored cars, prompt and polite service to patrons, and charge proper prices for it. We maintain the place for those who want the best of everything."

Right in the driveway leading into the building from Broadway is a platform on

kept supplied with full sets of parts of Panhards and all other foreign cars, and estimates for jobs of magnitude can be quickly furnished.

The Central was opened in June, 1901, and became a prosperous establishment almost immediately. The business is incorporated as the Central Automobile Co., and E. T. Kimball is the proprietor and manager. Mors, Renault and Peugeot imported cars and Buffalo electric cars are the lines sold, and a lively business is done in selling besides storing cars. Mr. Kimball is now expecting daily a shipment of Mors cars, of which make he contracted for a number while in Europe last fall. Most of the first lot will



accepted because of insurance agreements and also because of the business policy of the company. On the south side of the building is a washing table big enough to accommodate two cars at a time, and arc lights are suspended from the roof so that each side of the car can be seen by the men when cleaning without having to turn it around. Beyond the washing table are the charging boards, from which a dozen machines can be recharged at the time time, for electric vehicles form a considerable proportion of the "boarders" at this station.

At the rear of the building are repair shops of the first class, equipped with every facility for mending engines and bodies; in fact, so complete are they that they are like a small factory for turning out entire cars to order. There are separate rooms

one side for alighting patrons, and this platform leads into a comfortable waiting room built off the entrance way in a manner that reminds one of a keeper's lodge at the gateway of an English estate. An attendant is stationed at this waiting room in the entranceway both day and night, and patrons do not have to enter the building for any attention.

The business offices of the company are reached by a winding stair from near the gateway to a mezzanine floor about twenty feet deep that extends the width of the building, and has a balcony along its inner edge that overlooks the main floor. Abutting the offices on one side is a large stock room, in which a couple of men are busy most of the time, and at the other end is a room for the chauffeurs. The stock room is

and purchasers awaiting them on their arrival, one of those who have bought being Clarence E. Mackay.

The satisfying character of this station is amply indicated by the class of patronage it has. It does a big business in stabling electric broughams used by people prominent in fashionable society, and a big business also in imported tonneau cars. A few of those who store and repair at the Central are George Gould, Clarence E. Mackay, Colonel C. A. Postley, R. Horace Gallatin, F. L. M. Masury, Archibald S. White, M. G. Foster, W. G. Brokaw, C. G. Gates, August Belmont, J. E. Schwab and J. B. Brady.

There is always a bustle at the Central, for it is open every hour in the year, and one can drop in at any of the odd hours after midnight and find men washing carriages, oiling, adjusting and attending to charging. About eighty men are employed in the place, and both the night and day shifts are kept busy.

## NINE YEARS AGREEMENT ON SELDEN PATENT

(Continued from page 18.)

valve, V, through the medium of the cam shaft, S.

A clutch, Y, might be interposed between the motor and the gearing, M N, in which case the cam shaft, S, was to be positively driven. By means of this clutch Selden was enabled to throw the driving axle in and out of gear, an arrangement now used on every gasoline carriage. Selden saw the inconvenience of extinguishing the ignition flame or of closing the exhaust valve in order to bring the carriage to a standstill. The necessity of starting up the motor by hand rendered the provision of a device whereby the carriage could be stopped, although the motor were still in operation, of no little importance. He therefore introduced the clutch, which, it may be safely said, constitutes one of the cardinal elements of his invention.

The traction wheels, B, of the carriage are attached to the axle by clutches, splined on the driving shaft and held in mesh by springs in order to enable the wheels to rotate independently and to facilitate the turning of corners. The arrangement, though crude, is not a bad substitute for our modern differential gear. The clutches are actuated by hand wheels, I. The air inlet, d1 (Fig. 3), is likewise controlled by one of the hand wheels through the medium of gears, c1. The inlet supply valves between the tank, U, and the pump, g1, are opened and closed by a cord, e1, connected with a band wheel, I. The steering apparatus consists merely of a worm gearing driven from the hand wheel, A.

In order to reverse the vehicle Selden intended either to employ the system of reversing gears used in connection with the feed screws of engine lathes, or preferably to use a crane neck, whereby the driving wheel could be turned completely around underneath the body.

From this brief description of Selden's "road engine" it is evident that almost every important feature of the modern petroleum automobile is included in the operative mechanism. The main points are covered in the first and broadest of the claims, which reads:

"The combination with a road locomotive, provided with suitable running gear, including a propelling wheel and steering mechanism, of a liquid hydrocarbon gas engine of the compression type, comprising one or more power cylinders, a suitable liquid fuel receptacle, a power shaft connected with and arranged to run faster than the propelling wheel, an intermediate clutch or disconnecting device, and a suitable carriage body adapted to the conveyance of persons or goods."

A model, submitted with the application, is still in the model room in the patent office at Washington.

The Electric Vehicle Co.'s predecessor, the Columbia and Electric Vehicle Co., secured from Mr. Selden the exclusive rights to his automobile inventions, but only after about six months' negotiation, during which thousands of dollars were expended in investigating the validity of his patents. After this investigation the company immediately commenced a suit against the then strongest outside automobile manufacturers, the Winton Motor Carriage Co., of Cleveland, O., and

the Gasolene Engine Co., of Buffalo, N. Y., with the object of having the validity of the patent thoroughly proven. The Electric Vehicle Co. was soon assured of a thorough contest, as the principal outside infringing manufacturers organized a defensive association to support the Winton Co. Among those who joined with the two above concerns at that time were the Packard Motor Car Co., of Warren, Ohio; the Duryea Power Co., of Reading, Pa.; the Autocar Co., of Ardmore, Pa., and the Haynes-Apperson Co., of Kokomo, Ind. After action was begun in the suit all of the above companies practically withdrew with the exception of the Winton Motor Carriage Co., of Cleveland, and it is stated that between that concern and the Electric Vehicle Co. very nearly \$200,000 has already been expended.

After suit was begun, with the Winton Motor Carriage Co., Percy Owen and A. W. Chamberlain named as defendants, a demurrer was entered by the latter on Sept. 3, 1900. It was claimed that the Selden vehicle was not really a new invention at the time the letters patent were granted, and therefore not a patentable device. They offered British letters patent issued to Morel in 1863, to Mackenzie in 1865, to Witty in 1830, and to Hilton & Johnson in 1878, and United States letters patent issued to Lenoir in 1861, in support of their demurrer, but this was all overruled. Justice Coxe in the United States Circuit Court handed down a decision on November 10, 1900, manifestly favorable to the inventor and overruling the demurrer offered by the defendants.

Judge Coxe refused to hold with the defendants; contradicted the statement that the gas engine for road purposes was not new at the time Selden had applied for the patent, and asserted that some measure of inventiveness was required for the substitution of gas for steam as a motive power for road vehicles. Judge Coxe held that, while the Rochester vehicle may have been somewhat crude and tentative, it still must be regarded as the first concrete effort to construct a road locomotive provided with a liquid hydrocarbon gas engine of the compression type, which left the platform of the carriage unobstructed.

The Commissioner of Patents, in his annual report for the year 1896, published in the Official Gazette for May 12, indorses the Selden patent as follows:

"Selden, in 1895, received a patent, November 5, No. 549,160, which may be considered the pioneer invention in the application of the compression gas engine to road or horseless carriage use."

On November 30, 1900, Judge John R. Hazel, in the U. S. Circuit Court at Buffalo, agreed with Judge Coxe and dismissed all the demurrers, with costs to be paid by the defendants.

Then the case went to trial, and more than 2,000 pages of testimony were taken, which, however, was simply for the defendant's case. The evidence adduced was not only from data in this country, but all of Europe

was searched for evidence of an anticipation of Mr. Selden's invention. When the defendant's case was about to be closed it was found that nothing had been found which had not been known to the complainants, the Electric Vehicle Co., before they acquired their exclusive rights from Mr. Selden.

It was only a few days ago that it became known that on March 20 a decree was entered in the United States Circuit Court, Southern District of New York, Judge Lacombe, declaring the patent of George B. Selden, No. 549,160, valid in law and infringed by the defendants. This decision was rendered relative to the original suit of the Electric Vehicle Co. and George B. Selden vs. the Winton Motor Carriage Co., Percy Owen and A. W. Chamberlain.

This action had been anticipated for some time, the defendants recognizing their case as hopeless and joining in the movement to effect a protective organization, as already told.

A few months before this decision was rendered a suit for infringement was begun against Smith & Mabley, of New York, for infringement by selling imported vehicles, and this case is yet pending.

### Ray Will go to Berea.

By the middle of July next The Ray Automatic Machine Co., now at Cleveland, expect to be located in their new plant at Berea, seven miles west of Cleveland. The company's business has grown to such an extent that the present quarters have been outgrown. Recognizing this fact, a tract of about six acres of land has been purchased at Berea, and plans are being drawn for large factory buildings to be erected there at once. There will be three different departments, devoted to automobile parts, machinery and bolts and nuts, respectively.

The location is an admirable one in point of convenience. On the north there is about 1,000 feet of Lake Shore and Big Four trackage, while the Cleveland and Southern Electric Railway bounds it on the south.

### Special Department for Automobile Work.

To such proportions has the automobile business of the Billings & Spencer Co., Hartford, grown, that it has become necessary to form a special section for this class of work. An automobile forgings department has therefore, been created, with an entirely separate equipment of steam drop hammers, etc. Here all the orders for automobile forgings will be executed, and an increased capacity as well as greater facility will result.

### Will Double its Capacity.

Considerable improvements will be made to the West End and Allenhurst (N. J.) stations of the Electric Vehicle Co. When these are completed, which is expected to be by May 1, the stations will have twice their former capacity.

The Moyea Automobile Company will enter a vehicle in the approaching commercial test promoted by the A. C. A. A racing Moyea car is also planned, and will probably make its appearance next summer.

## FISHER WINS THE THOUSAND

**In a Borrowed Car, he Plows Through Indiana mud for Gold and Glory—and Business.**

Quite the nearest approach to a long distance road race that has been run in this country in several years occurred on the 24th ult. in Indiana, the route being from Indianapolis to Columbus and return, a distance of 100 miles. The contestants were Carl G. Fisher and W. A. Carr of the former place. Fisher is the Oldsmobile agent for Indianapolis and vicinity, and Carr represented Conrad Mueller, the Cadillac agent. The race was for \$500 a side and grew out of a heated discussion as to the respective merits of the two cars and a resulting newspaper challenge. Each side had its followers and partisanship ran high.

The start was made from Indianapolis at 9:19 a. m., and although the roads were in fearful shape, being hub deep in many places, Fisher ploughed through it in fine style, reaching the turning point at 12.22 and crossing the finish line at 2.55 p. m., completing the hundred miles and winning the race and wager in 5 hours 36 minutes. Carr's connecting rod broke 48 miles from the finish and placed him hors de combat.

That there was intense rejoicing in the Oldsmobile camp goes without saying. Fisher himself was so elated and so confident of the results that would follow his performance over such vile roads that in wiring the Olds Motor Works of his victory he coupled it with an order for 10 carloads of "the best things on wheels." What really made his achievement the more impressive was the fact that in the race he used a borrowed car; the demand for Oldsmobiles having kept ahead of the supply, he had not one of them in stock the night before the event and was perforce compelled to borrow one from a customer, and one that had been in use all winter.

### Century Plans a New Factory

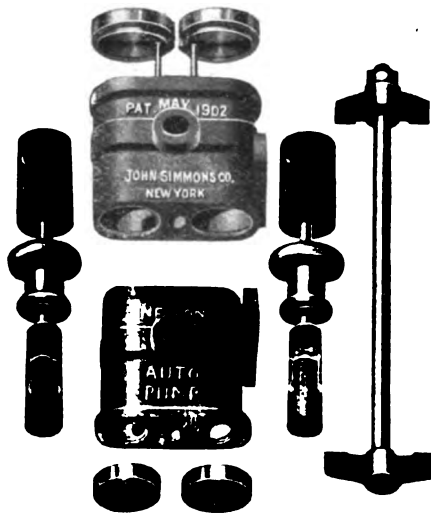
General Manager Van Wagoner of the Century Motor Vehicle Co., Syracuse, N. Y., was in New York last week. He stated to a Motor World representative that it was the intention of his company to erect a new factory one-quarter of a mile long in order to provide facilities for their rapidly growing business. A tract of ground is had in view, and, although it is now occupied by twenty-seven houses, these will be torn down to make room for the new buildings.

The Century company has been unusually successful in obtaining orders, these being sufficient to keep the factory busy throughout the season. It is its intention therefore, to henceforth devote itself to the producing end of the business. The orders now on the books will be filled exactly as the delivery dates call for the cars, and new ones will be refused until this is done.

### Steam Pump of Original Design.

In the Nelson steam water pump the John Simmons Co., No. 104 to 110 Centre street, New York, offer a radical departure from any recognized type of pumping engine at present applied to either stationary or traction work.

In this pump there are but two actual working parts; there are no valves in either the water or the steam cylinders; stuffing boxes have been discarded, and instead a ground sleeve is used, one in each distance piece which separates the two cylinders. The ground joints eliminate the necessity of using packing, which is at all times undesirable and a nuisance. The pump is held



together by a single bolt, which passes longitudinally between the cylinders and has at each end a bridge piece, crossing from the centre of one cylinder to that of the other, thereby distributing equally the strain on all the joints. By simply removing a nut the whole pump may be taken apart for inspection.

The Nelson pump may be operated as slowly as ten strokes per minute, or it may be speeded up to the maximum steam pressure carried. It will feed the boiler from any pressure from ten to 300 pounds, and lift water fifteen feet without priming. It will pump three and one-half gallons per minute at any pressure up to 300 pounds and heated to 200 degrees Fahrenheit.

### Recent Incorporations.

Scranton, Pa.—Twin Motor Vehicle Co., with \$100,000 capital; to manufacture vehicles of all kinds.

Columbus, Ohio—Columbus Motor Vehicle Co., with \$100,000 capital.

Toledo, Ohio—Todd Mfg. Co., with \$100,000 capital; to manufacture automobiles, bicycles and parts. The officers are S. S. Thorn, president; J. V. Todd, general manager; J. D. Crawford, secretary, and J. J. Cooney, treasurer.

### Will Remove to Centre Street.

On April 10 the Electric Contact Co. will remove to Nos. 202 and 204 Centre street, this city. They have taken on the line of spark plugs, etc., made by E. Q. Williams, Syracuse, N. Y., and will market them here.

## END OF WASHINGTON SHOW

**Attendance is a Disappointment, but Exhibitors are Pleased—Much Business is Done.**

Washington, D. C. March 28.—The sounding of "Taps" by a bugler of the Northwestern Military Academy brought the automobile show, which has been running here for a week, to a close to-night.

This show, the second to be promoted by the automobile dealers of this city, was somewhat of a disappointment so far as the attendance was concerned; at no time during the week was the exhibition hall anywhere near being crowded. However, those who visited the show appeared to be interested in the subject, and were not hampered in their inspection of the exhibits by a crowd of the merely curious people who are generally so much in evidence at trade exhibitions.

Despite the small attendance the dealers must have been pleased with what was accomplished, as they have already decided to repeat the event next year, but in Convention Hall, the scene of the first show; the date probably will be the last week of March.

The Motor World man made a tour of the hall just before the close of the show, and saw "Sold" cards on seventeen machines. A local paper makes the assertion that the sales made during the week aggregated \$160,000, but this is probably somewhat in excess of the actual volume of business done.

The officers and members of the National Capital Automobile Club were very much in evidence at the show, the club having a tastefully decorated booth near the entrance to the hall. The booth was supplied with easy chairs, and afforded an inviting resting place for all who cared to avail themselves of the club's hospitality. A large table in the centre of the booth contained late issues of all the automobile papers, and these found much favor with the visitors. It is understood that the club will be reorganized some time during the summer, and that it will then arrange to maintain a country clubhouse.

On Thursday J. F. Hurlbert, in a Cadillac car, made an attempt to climb the steps of the Capitol. He was going splendidly, and had got about half way up, when his chain broke and the car ran down backward, but without injuring the car in the slightest degree.

### Exhibition at Quaker City Next Year.

An automobile exhibition, to be held next year, is being arranged for by the Philadelphia Commercial Museum. Neither the date nor the duration have yet been determined.

On March 25, the first day licenses were issued to New Jersey autolists at the office of the Secretary of State, Trenton, 100 certificates were given out.

## SELLING GOES BY FAVOR

How a 'Cute Salesman got an Endless Chain Started From one Buyer.

"Talk about your endless chains; they are not in it with the automobile business," remarked the salesman for a large New York house that has a pretentious automobile department. "If you make one sale to a man, and he likes the car, you will find before you wind up that anywhere from two to half a dozen of his friends are secured as customers also.

"You see, I don't always wait for customers to come into the store. My list contains the names of a number of people, some of whom are actually thinking of buying an automobile or have talked of doing so, while others have not even reached the latter stage. Strange as it may seem, the latter are the kind of people I like to tackle. There's a piquancy about it that fascinates one after a while and more than offsets the disagreeableness of trying to sell a man something that he hasn't the slightest intention of buying. It takes 'nerve' at first; but you soon get used to it, and, as I say, like it. There are all sorts of funny experiences connected with it, and they preserve it from monotony.

"One thing that helps us is the standing of our house. It is only necessary to present its card to get a hearing, and after that it all depends on your line of talk.

"Some weeks ago—it was a nasty, rainy day, with no danger of an overflow of customers at the store—I 'braced' a man in the Empire Building. He dealt with the store, and was a youngish man with a good income who ought to have an automobile, even if he did not think so. He only needed a good talking to in order to perceive the error of his ways. And I felt pretty sure that I could bring him around if I had a fair show. At any rate, I felt just in the humor to try.

"He was very busy, and did not give me a very good opening. However, the sight of my card thawed him a little, and I started in. I soon got him interested, although he did not seem to want to admit it. The fact encouraged me, however, and I gave him a good line of talk. The pleasures of automobiling were eloquently portrayed, and the convenience, swiftness, endurance and all around goodness of the self-propelled vehicle dilated upon at length. After a while he laid aside the pretence of indifference and listened intently and even asked a few questions. But he did not commit himself, not even so far as to promise to drop in at the store and take a look at the car. But I felt pretty well satisfied with my work, and we parted very pleasantly.

"A few days later he called me up on the 'phone and asked me if I could give him a ride on one of the cars. I made an evening appointment with him and we had a fine ride. So enthusiastic did he become that I

almost forgot what I was doing, and we had got pretty well in town on the way back before I began to think of slackening speed to get down to eight miles an hour. To tell the truth, I did not think of it at all until a mounted policeman made the suggestion, and to emphasize it took us along to the station house. My companion bailed me out, and as we left the place indulged in some pretty strong language about the idiocy of such a speed limit. I felt then that he had fallen a victim to the automobile bacilli, and I was well content to let it get in its fine work.

"Sure enough, he succumbed a short time ago, purchasing the car I had recommended, of course. Since then he has been a most enthusiastic motorist. He operates his own car, and has become quite expert in its management.

"But he did not stop there. He recommended it to his friends, and out of nearly a dozen names that he has given me at various times I have made three sales and have as many more as good as arranged for. Besides that, and here is where the endless chain business comes in, those of his friends who have bought are giving me the names of friends of theirs to work on. 'Go see Jim So and So,' they will say. 'If you work him right you can sell him a car.'

"You may be sure that I don't lose any of these links of the chain. Each name is treasured carefully, and if I succeed in selling one in ten we will have trouble in getting enough cars to supply our trade."

## Struck a Lightless Railroad Gate.

Only by the narrowest margin did a well known racing motorist of the Middle West escape serious injury or even death a short time ago. He was returning home one night, travelling, well, quite up to the legal limit, when, without the slightest warning, he crashed into a lowered and unlighted railway gate. The gate was splintered into

fragments, of course, and the portion just in front of the car struck the steering wheel and post with terrific force, bending both, but fortunately not breaking them. The thing was done in a moment, and almost before the two men in the car could realize what had occurred they were across the railroad tracks. A quick stop was made, and an account of the damage taken. The steering column was badly bent, but not so badly that it could not perform its office; and no other part of the car had been damaged. Considerably shaken up and with a determination to watch for railroad crossings thereafter, the journey was resumed.

## Parisian Horse Marts, Decline.

The slow but certain substitution of automobiles for equines is said to be evidenced in the gradual falling off of Parisian horse sales. Cheri's and Tattersall's marts are beginning to feel unmistakably the effects of the automobile's superiority, both in attendance of bidders and amount of bids.

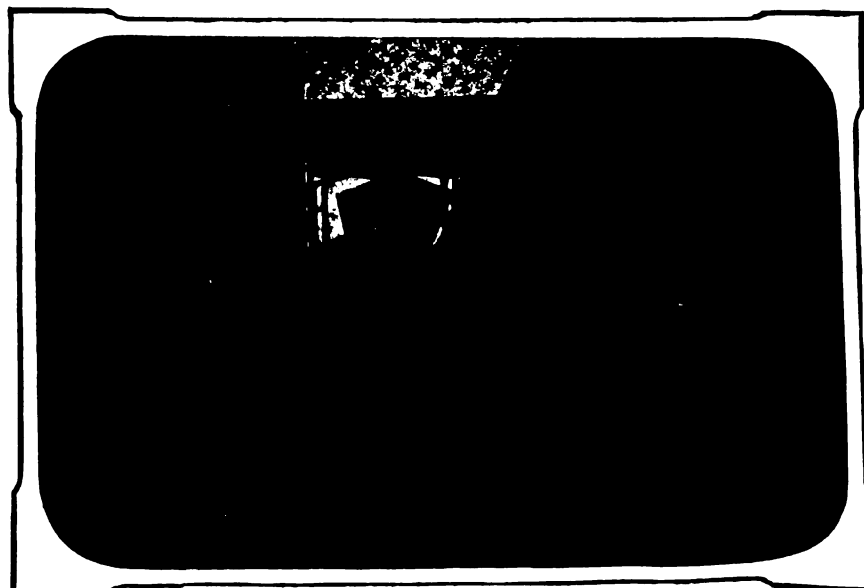
## World's Platinum Supply Comes From Russia.

The greater portion of the world's platinum is produced in Russia. Hitherto the metal was refined in other countries, but Russia is taking steps to do her own refining, as the process is cheap and the price nearly doubled thereby.

## Rust and its Ravages.

Rust affects injuriously both iron—or steel—and rubber. Unless a rim is well protected by enamel or paint it will rust; and then the tire is placed in some danger. If the fabric is once attacked serious damage is pretty sure to be done.

The French Cycle Automobile Traders' Association has voted \$2,000 to assist French manufacturers to exhibit at the St. Louis World's Fair. M. Darracq is president of the board.



A NEW YORK ELECTRIC TRUCK USED FOR TELEPHONE REPAIR WORK.



## STEAM CAR PROGRESS

### Former Shortcomings Corrected and Vastly Improved Vehicles Offered—An Example.

"To those who have been watching closely the progress of what is called the motor improvement, it has become apparent that with the rapid development of efficiency in gasoline cars, there has been during the last year a corresponding and possibly even a greater development in the efficiency of the light steam car as a practical road vehicle," says Filson Young in the Autocar.

"The condition of the light steam car was, until a very short time ago, broadly this. For some two or three hundred pounds the purchaser has been able to get a light car which would run in fine weather and on fine roads with great ease and smoothness for a short time, but which, after a little while, would begin to show signs of wear and tendency to break down, chiefly owing to the lightness of construction and somewhat haphazard trust in the operator's knowledge and experience. The owner of such a car wishing to get the greatest possible amount of efficiency out of it found himself virtually prohibited from taking it out except in fine weather when the roads were dry, as the splashing of mud into the bearings of the small engine rapidly produced symptoms of an approaching end to that engine's efficiency. He found himself, moreover, pinned down to routes where he could pick up clean water within twenty mile stages, and he was also under the necessity of replenishing the gasoline tanks at intervals of not less than forty miles.

"This, of course, although it provides possibilities of a very pleasant kind of country jaunt or journey, can hardly be described as motoring in the serious sense in which that term is nowadays used. To enable the steam car to hold its own with its great rival, it becomes at once necessary to extend its sphere of 'non-stop' activity, and to so strengthen and protect its working parts that it may be as independent of weather and condition of roads as it is possible for a pleasure vehicle to be.

"Now there are a great many people who prefer steam as a motive power to any form of internal combustion engine hitherto devised, and the greatly improved education of the public in matters of mechanics and simple engineering, which has been brought about by the increased use of machinery in modern life, disposes of the alleged bogey of difficulty of management with regard to the steam engine. Really a small steam engine is easily managed and requires only a little knowledge and the kind of common sense that is employed in the treatment of horses, or other animals. Just because it is more sensitive than the gasoline engine, it is more easily damaged by neglectful usage,

but we have in the steam engine a powerful, accommodating and faithful servant, which makes few demands. Its ease in running, when applied to a motor car, produces the silence and smoothness that have done so much to popularize it. It means much more than increased enjoyment to those who use it. Noise and vibration usually mean wear, and this involves renewal and expense; inversely, absence of noise and vibration means less wear, and a resultant economy in bearings, tires and wheels.

"That the problems to which I have referred as being of urgent importance have not been neglected by the designers and builders of small steam cars is abundantly shown by the recent development and improvement in their practice. So far as cars running in England are concerned, the credit for this improvement is mainly due to the builders of the White cars. By grappling with the problems of lubrication, condensation, and, above all, of a boiler which should be practically automatic and 'fool proof' in its action, they have achieved much; and, by a care in construction which had not been generally shown, they have gone far to remove many of the disabilities under which steam cars have hitherto labored.

"In addition to this they have recently brought out a steam car of a type which I believe will have a great vogue in the future, namely, a steam tonneau car with the engine in front under a bonnet in such a position that all taps and levers can be brought immediately in front of the driver on a control board, thus doing away with the awkward fumbling under the seat made necessary by a centrally placed engine. This, however, is a heavy car, and comes outside the scope of my immediate purpose."

### To Improve Road Across Jersey Meadows.

At last a decent road between Jersey City and Newark is in sight. The Hudson County Board of Freeholders have decided to improve the Belleville Turnpike across the Jersey meadows and make it passable for automobiles and other vehicles. The work will cost \$55,000, one-third of which will be paid by the State of New Jersey and the remaining two-thirds by Hudson County.

This will be hailed with satisfaction by automobilists who drive their machines over the Newark Plank Road, which is generally congested with the traffic of trucks and trolley cars. The improvement of the Belleville Turnpike will not only practically give the automobilists a roadway of their own, but will shorten by nearly two miles the journey from Arlington, Bloomfield and Montclair to the Jersey City ferries.

### Bridgeport Club Will Banquet.

Jesse B. Cornwall, Bernard Setzer and Thomas Fish have been appointed a committee to make arrangements for the annual banquet of the Automobile Club of Bridgeport, Conn., which is to be held on Monday evening, April 6.

## A SCIENTIFIC "GRAFTER"

### Wanted Both Dealer and Employer to Pay Tribute—His Cool Proposition.

"There are 'grafters' and 'grafter' in this automobile business," said the salesman for a specialty house in this city to a Motor World man the other day. "As long as a man is content to make a 'decent bit' I don't condemn him utterly. But when he makes a hog of himself I think it is time to call a halt.

"Here is the game I ran up against the other day," he went on. "The chauffeur of a wealthy young automobilist came to me to look at a device I am selling. After asking a lot of questions about it, and apparently receiving satisfactory answers, he got down to business. He inquired the price, and I told him that it was \$20.

"I want three of them," he said. 'Let me see, your discount is——' and he paused suggestively. I informed him that the price was net.

"Oh, well, you can give me 10 per cent anyway. That will be \$2. Now, then, bill the three to Mr. Blank"—mentioning his employer—"at \$25 each. That will be \$7 on each coming to me, or \$21. Then we will both make something out of it."

"His cool assumption that I would be a party to such a nefarious scheme riled me so that I could scarcely find words to answer him. Finally I managed to say that the price was \$20 net, and that I would sell them and bill them at that figure or not at all. He retorted that he could get other dealers to make such an arrangement, and he didn't see why I should get so hot about it. Well, maybe he can. But not from me. If I can't do straight business I won't do it at all."

### Owner Acquitted: Chauffeur's Turn Next.

Last week the case against W. K. Vanderbilt, Jr., in connection with the excessive speeding of his automobile at Paris, was again taken up before Judge Becker, who said that, in view of the previous testimony showing that Mr. Vanderbilt was not in the automobile when the speeding occurred, the former nominal sentence of two days' imprisonment would be annulled, and all proceedings against Vanderbilt would be discontinued. The case against Vanderbilt's chauffeur will be heard later.

### Result of Bent Sparking Plug Points.

When a sparking plug is being placed in its socket the points are very liable to be knocked out of adjustment by accidental contact with the cylinder wall, especially when the operation is being performed at night. The resulting misfires, or the entire refusal of the motor, to start, often seem quite inexplicable.

## BLOCKED THEIR LITTLE GAME

### Automobile Club's Fulmination Against Chauffeurs' Evening Races—Practice is Stopped.

One of the abuses practiced by chauffeurs to which the Motor World called attention last week was that of racing the cars of prominent men on the Hudson County Boulevard at night. It now seems that the speeding on that highway has attracted the attention of some one who has thought it worth while to notify the Automobile Club of America. Whether the speeding that was reported was actually done by members, or whether the cars of members run by their chauffeurs were noticed, seems to be open to question in view of the practice of the chauffeurs exposed by the Motor World. At any rate, there has been posted on the bulletin board of the Automobile Club the following notice, signed by Secretary S. M. Butler:

"It has been called to the attention of the Club that several members are speeding their automobiles on the Hudson County Boulevard, New Jersey. The president desires me to urge upon the members that this practice be stopped, and to say that reckless driving on the Hudson County Boulevard will prejudice the use of automobiles in New Jersey."

Secretary Butler, when asked about the notice last Saturday, said he could not state from what source the information about the speeding had come to the club, nor whether the names of any members had been mentioned by the informants. He said that it was unfortunate for such things to be going on at a time when the automobilists were trying to get reasonable legislation in New Jersey, and that the notice was posted with regard for the bill which then was pending the Governor's signature.

### Bridge Tolls in Nutmeg State.

Fifty per cent more than for horse drawn vehicles is the rate of bridge toll fixed by a bill now before the Connecticut legislature and reported favorably by the committee on roads, rivers and bridges. It is as follows:

"For power vehicles, except motor cycles, the fares and tolls of the several ferries and toll bridges shall be as follows: For power vehicles with not more than one seat, 50 per cent more than the fares and tolls for a four wheeled carriage and one horse; for power vehicles with more than one seat, 50 per cent more than on a four wheeled carriage and two horses; and for each additional person accompanying such power vehicles the same fare shall be charged as for additional passengers in carriages."

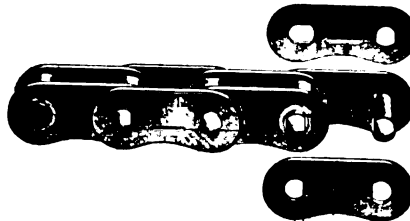
On August 30 a series of automobile races will be given by the Frankfort (Germany) Automobile Club.

### To Test Validity of Local Ordinance.

In order to bring the question of the validity of the automobile ordinance before the Superior Court, P. George Gow, of San Rafael, Cal., who was recently arrested for an alleged violation of the ordinance, surrendered himself to the authorities, and then sued out a writ of habeas corpus. In his petition Gow alleges that the ordinance is oppressive, discriminating, prohibitory and unreasonable, and is in violation of and contrary to the rights and privileges granted him by the constitution. Judge Lennon issued the writ, and released Gow on his own recognizance. It is the general opinion that the ordinance is ridiculous and will be invalidated by the court.

### Here's a Detachable Roller Chain.

Any article emanating from the Whitney Mfg. Company commands respect by reason of that fact alone. The Hartford concern has just brought out a new chain that will compel attention on its own account and prove a boon to motorists. It is a detach-



able roller chain of original design, as will be seen by reference to the cut.

In addition to the regular side plate, B, there is an auxiliary locking plate, A, made of spring steel. The irregular shape of the holes in the former effectually prevents its turning on the rivets, while the spring steel plate locks the regular plate and absolutely prevents its coming off. Each link of the chain is detachable. When necessary for the purpose of making a repair, or to shorten or lengthen a chain, it can be taken apart quickly and without any difficulty. Notwithstanding these conveniences, all the advantages of the solid link riveted chains are retained. The new chain has been thoroughly tested, its adoption by a prominent automobile manufacturer following his experiments with it.

### Difference Between Nerve and Nerves.

Nerves will play a considerable part in the winning of the big European road races. To drive a big car at upward of a fifty-mile an hour pace calls for skilful management. As one famous racing man has put it, "contestants have no business to have nerves." Which is only another way of saying that almost as much depends on the man as on the machine.

### Hartford Sets a Good Example.

It has been decided by the Hartford City Council to fit up three of the city water troughs with appliances for supplying automobiles with water. The increasing number of the self-propelled vehicles was given as the reason for taking this action.

## MILLWAUKEE MOTORISTS FIGHT

### Declare Automobile Bill is Absurd—Stop-on-Signal Clause is the Storm Center.

In the Wisconsin legislature the fight over the Moldenhaur automobile bill is being waged fiercely. The Milwaukee Automobile Club is taking the lead in the matter, and last week it had a substitute bill introduced.

The original bill provides that the driver or chauffeur of an automobile shall stop his machine if signalled to do so by any one approaching with a horse, the signal being the putting up of the hand of the person driving the horse. The substitute provides that "every person in control of an automobile or other motor vehicle shall, when approaching any person riding or driving a restive horse or horses, operate such vehicle in such manner as to exercise every reasonable precaution to prevent the frightening of such horse or horses, and, if necessary to prevent accident or injury, shall reduce the speed of such vehicle until such horse or horses shall have been allowed to pass, or until such horse or horses appear to be under control of their rider or driver." Another section of the substitute provides that any ordinance heretofore passed by any town, village or city inconsistent with this provision shall be null and void.

Arguments were heard both for and against this substitute. The clause nullifying local ordinances was strongly attacked.

### Determining the Tire Pressure.

Tires should be given a degree of inflation depending on their size and the weight they have to carry. The pressure necessary covers a pretty wide range—all the way from 50 to 80 pounds to the square inch. Taking a touring car weighing in the neighborhood of 1,200 pounds, carrying four passengers, and assuming the weight to be equally distributed over the four wheels, the correct pressure would be about 50 pounds to the square inch. To determine the distribution of the weight the car should be run with the front wheels only on a scale and the weight taken with its ordinary load, and then the back wheels should be similarly treated. Then the car should be weighed complete. The back and front weights should total the same.

As a good rough test, take the spokes of the wheel and move them to and from you. If the tire rolls materially under this treatment, you will know that more pressure is wanted.

### Taking Care of the Carburetter.

The carburetter should be periodically removed (about every 750 miles), dried and carefully washed out with fresh gasoline. In this way particles of dirt and any water which may be present are got rid of, and the chances of trouble on the road lessened.

### Getting Ready to Comply With Bill.

Prompt action has been taken in the way of notifying motorists of the new automobile law in force in New Jersey. The measure received the Governor's signature on Monday night and took effect at once. On Friday the Automobile Club of America issued a circular letter to its members calling attention to it and pointing to the necessity of at once complying with its provisions should the State be entered. Attached to the letter was a blank "Declaration and Statement," designed to be filled out by owners of automobiles. A copy of the New Jersey law accompanied the letter.

In several of the salesrooms and garages also action on similar lines was taken. Notices calling attention to the passage of the law were posted, and in some cases a brief synopsis of its provisions was given. Its exacting regulations were referred to verbally as well, the attention of customers, especially if they were at all likely to use New Jersey roads, being frequently drawn to the matter.

"Pretty stringent, isn't it?" remarked one local manager to the Motor World man on Saturday as he pointed to the typewritten notice that decorated the bulletin board in the salesroom. "I suppose we will have to comply in a hurry or they will get after us in short order. Some of those fly Jersey constables won't want anything better than to pull in a few of us. And the penalties are not to be sneezed at, I tell you. Think of paying \$50 just because you hadn't time to get your license from the Secretary of State at Trenton! Or \$15 because you haven't got your number on your lamp!"

"There's one thing certain," he went on. "Either they will hold up for a few weeks, until motorists can get their licenses and numbers, or there will be a wholesale jailing of motorists that will do more to hurt Jersey with visitors of this class than anything else that could possibly happen. Maybe they—the officers—will have sense enough to go slow at first. But I am not at all sure of this."

### His Pleasant Surprise.

"On the chance that his car will be among them, Mr. Masury drops around whenever he learns that we have a shipment coming in," remarked Assistant Manager Winans, of the American Darracq Automobile Co. to the Motor World man on Friday, indicating John W. Masury, of the well known paint concern. "He waits until the cars are unpacked, and when he finds it is not for him he leaves much disappointed."

"There is a pretty good chance of his getting his car this week. In addition to the one being unloaded we have several others coming through the Custom House, and they should reach us to-morrow. His car was ordered nearly five weeks ago, and is about due. For the matter of that, the one on the dray now may be his. I'll see if it is," and he ran over a pile of invoices.

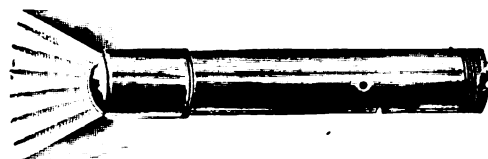
"Well, that's funny," he ejaculated. "It is

his, sure enough. Here it is, a 20 horsepower touring car, for John W. Masury. Maybe he won't be glad," and Winans hurried out to tell his customer of his good fortune.

### No Danger With This Lamp.

On the score of safety alone a portable electric lamp is worth many times its cost. In addition, it has convenience, cleanliness and cheapness to recommend it, and it is therefore, not surprising that it should prove popular.

The Evening Star lamp is the latest design of the Electric Contract Co., No. 53 Maiden Lane, New York, and is the result of an effort to produce a high grade article at a low price. It is finished in either nickel plate or oxidized copper. The casing is of



brass instead of fibre or tin, thus making a strong and durable lamp.

The three cells which compose the battery are not soldered together in the form of a cartridge, but are dropped into the tube one by one, a construction which makes possible the replacing of a single cell without throwing away the whole battery. Between the lamp bulb and the battery is a thrust block fitted with a spring, which prevents shocks to the bulb and insures good electrical contact at all times. The lamp bulb is placed in the focus of a polished aluminum reflector, so shaped as to concentrate the light upon the object or surface to be illuminated.

The Evening Star lamp is made in four sizes, the weights ranging from eleven to thirty-two ounces. The batteries will last from five to fifteen hours, total use, according to the size. Although made to burn only when the button is pressed, a device is furnished at a slight extra cost which renders it possible to burn the lamp continuously.

### Cause of the Chain Clicks.

A chain drive ought to be nearly noiseless when new and in good condition, but as chains are hardly ever encased in present automobile practice, and as they are particularly vulnerable to grit and difficult of lubrication, they are subject to rapid wear. After the rivets have begun to wear and the tooth outline is deformed the chain stretches and no longer fits the sprockets. The block or roller ceases to fall into its place properly, but each block strikes its tooth and later snaps into its space. There are thus two separate noises for each link as it passes each sprocket—when it strikes the tooth and when it later snaps into place, and much noise is the result.

George P. Hewitt has established a salesroom and garage at 812 College Ave., Appleton, Wis. He has taken on the Rambler car.

### Lakewood Run to Open A. C. A. Season.

The 1904 season will be formally opened by the Automobile Club of America on Saturday, April 4, when a run to Lakewood has been scheduled.

The members will rendezvous at the Lakewood Hotel on Saturday evening, taking dinner there. The return to New York will be made on Sunday or Monday. Storage facilities can be had at Hoff's garage, Main street, Lakewood, where supplies can also be obtained.

Chairman Emerson Brooks of the runs and tours committee gives the following as the best route from New York:

Via Staten Island ferry to St. George, Shore Road to Tottenville, ferry to Perth Amboy, Metuchen, New Brunswick, Old Bridge, Mount Pleasant, Morganville, Freehold, Turkey, Farmingdale, Squankum and Lakewood.

The distance to Lakewood is slightly more than eighty miles, and the roads are nearly all good. Last year the opening run of the club took place on April 5, the destination being Ardsley-on-the-Hudson.

### Third Factory Addition for Cadillac.

As is well known, the Cadillac Automobile Co., Detroit, Mich., has among its stockholders five of the ten wealthiest men in the Michigan metropolis. Consequently it is abundantly supplied with the sinews of war, and the struggle to produce enough goods to supply the ever increasing demand for this phenomenally popular car is never interfered with by lack of capital.

In providing increased manufacturing facilities successive additions to the plant have been made. The first took the shape of a three story building 250 by 43 feet. The second was a slightly larger one, 250 by 50 feet, and three stories, as before; a third time ground has been broken, and a brick building 100 by 60 feet and three stories in height is in process of erection. It will be stocked with up to date machinery as soon as completed, and put in operation.

The ability to fill orders is thus assured, especially since and even during the New York show the policy of refusing to book any more was adopted.

### Latest in Eye and Face Coverings.

An assortment of goggles that it would not be easy to surpass for completeness and variety has been received by Charles E. Miller, No. 97 Reade street, New York. Among the new styles is one with a pneumatic protector, a rubber tube filled with air and covered with kid being so attached that it comes in contact with the face, interposing a buffer. Another has a detachable nose piece with coverings for the ears. Various skin covered goggles—other and other soft furs being used—are also comprised in the collection. Veils, hoods and other head coverings for women motorists are also shown.

R. A. Greene, manager of the John Wanamaker automobile department in this city, is ill with diphtheria. It will probably be several weeks before he will be able to leave his home.

## CLIMBS STEPS OF CAPITOL

**Oldsmobile Goes up Unflatteringly—Applauded by Michigan's Governor and Legislators.**

In itself the climbing of a 44 per cent grade by an automobile would be a notable performance; but when the "surface" of the grade is composed of steps it will readily be seen that the feat was one of a phenomenal nature.

A standard Oldsmobile, with E. Doan at

per cent, this being on a plank. Obviously, therefore, the climbing of a still steeper incline, in the jerky manner necessitated by the character of the "surface," was a much more meritorious performance.

### Should set the Fashion in Catalogues.

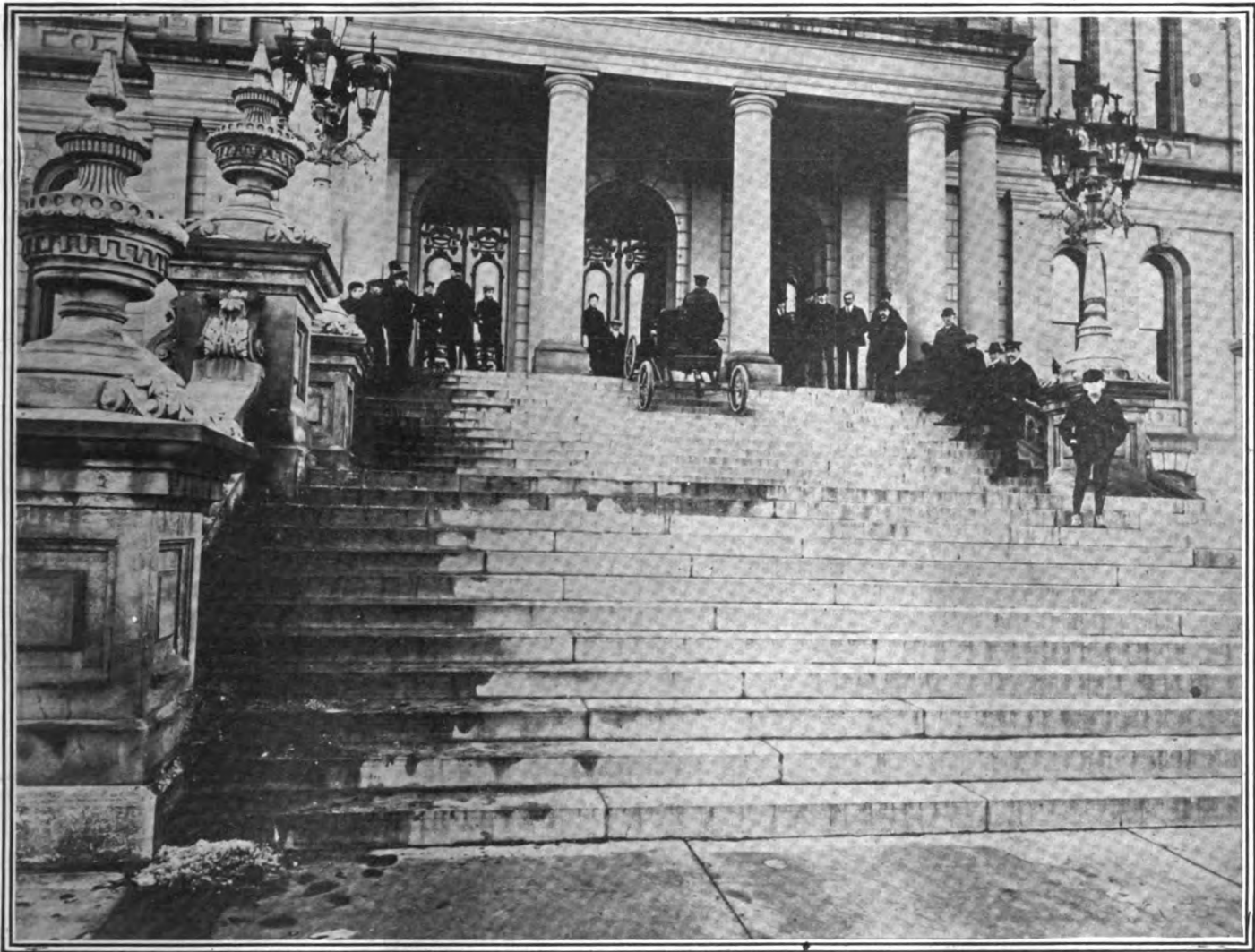
Of catalogues that are made up of more than a cover, some adjectives and photographic reproductions of a particular car or cars, one has finally made its appearance, that of the Searchmont Automobile Co., Philadelphia.

The cover is a handsome one in red and

## OPENING IN MINNEAPOLIS

**Pence Establishment's Facilities Revealed—Well Known Cars Shown to Visitors.**

The new showrooms of the Pence Automobile Co. at No. 315-319 Third street, Minneapolis, Minn., were opened last week in gala fashion in the presence of a large assemblage of visitors. Six of the eleven makes of cars handled were shown. They were the Cadillac, Baker, Toledo, Autocar,



the lever, was the star performer in the little drama enacted on the steps of the State Capitol at Lansing, Mich., and shown in the accompanying illustration. There are twenty-five of these steps, each having a rise of six inches and a width of 13½ inches, making an actual grade of 44 per cent, and one much more difficult to surmount than an ordinary plank incline. Up this stately incline the little runabout was driven, and the top was reached without a falter. An entry was then made into the rotunda, where it and its operator were warmly received by Governor Bliss and an admiring group of legislators.

Previously the steepest gradient ever surmounted by an automobile was one of 42.78

gold, and the typographical appearance is high class, but, what is more to the point, it contains the detailed plans of the Searchmont car, showing exactly where each and every part, great and small, is located; the more important parts, the carbureter, the valves, the dynamo, the commutator, etc., are also shown separately and in section, so that all may see and understand.

It is the most satisfying catalogue that has yet seen the light, and points the plan that all ultimately must or should follow.

Geo. F. Keep, of Natick, Mass., has purchased an automobile store at Waltham, Mass. He will make a specialty of repairing.

U. S. Long Distance and Stevens-Duryea.

The building, of which the Pence company occupies the entire ground floor, is 50 by 150 feet in dimensions. The front part is used for a showroom, and is 30 by 50 feet. Adjoining this is a large room for storing, repairing and charging machines. This department is equipped with a wash rack constructed especially for this class of work, and with other apparatus necessary to an institution of its kind. In the rear is a machine shop having all facilities for repair work and machinery for making different parts likely to be required.

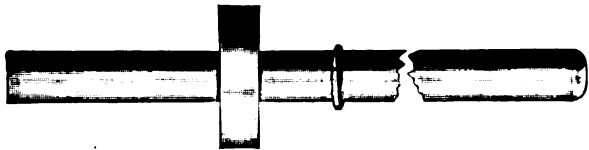
Foster Milliken has purchased a 24 horse power Panhard from Barry & Hayes.



# CAN WE WELD IT BY ELECTRICITY?

Send sample, drawing, blue print or sketch  
and tell us how many.

## If it can be done, we can do it.



This is just one illustration.

### THE STANDARD WELDING CO.

CLEVELAND, OHIO.



MANY of the Leaders have adopted  
"Whitney" Standards for Roller  
Chains, and the following have written  
strong letters endorsing same:

THOMAS B. JEFFERY & CO.,	-	"Rambler."
CADILLAC AUTOMOBILE CO.,	-	"Cadillac."
KNOX AUTOMOBILE CO.,	-	"Knox."
ELECTRIC VEHICLE CO.,	-	"Columbia"
AUTOCAR COMPANY,	-	"Autocar."
BAKER MOTOR VEHICLE CO.,	-	"Baker"
GROUT BROS.,	-	"Grout."
PRESCOTT AUTOMOBILE MFG. CO.,	-	"Prescott."
WISCONSIN WHEEL WORKS,	-	"Mitchell"
AUTO VEHICLE CO.,	-	"Tourist."

**The Whitney Mfg. Co.,**  
HARTFORD, CONN.



## IMPORTED Motor Goggles

We have just received a large shipment of European Goggles  
for automobile and motor cycle use.

We are United States representatives for the manufacturers.  
Our prices are the lowest ever quoted in this country.

We are also sole American agents for the celebrated  
**BRAMPTON CHAINS**, made from self-hardening steel. Sizes  
in stock to fit the Panhard and other European motor cars.

CATALOG MAILED ON REQUEST.

THE LARGEST AUTOMOBILE SUPPLY HOUSE  
IN AMERICA,

**CHARLES E. MILLER,**

Manufacturer, Jobber, Importer and Exporter,

97-99-101 Reade Street, NEW YORK.

# Automobile Wheels

For all Classes of Vehicles.

**STEAM,  
ELECTRIC  
and  
GASOLENE.**

The largest manufacturers of high grade Automobile Wheels in the United States.

Every wheel guaranteed exactly as represented.

**NEW HAVEN CARRIAGE CO.,**  
New Haven, Conn.

THE HOME OF RELIABLE CARS

**BANKER BROS. CO'S.**



**141-143 West 38th St., New York**

**LARGEST DEALERS IN AMERICA.  
NO EXPERIMENTS SOLD.**

PITTSBURG,  
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NEW YORK,  
141 & 143 West 38th St.  
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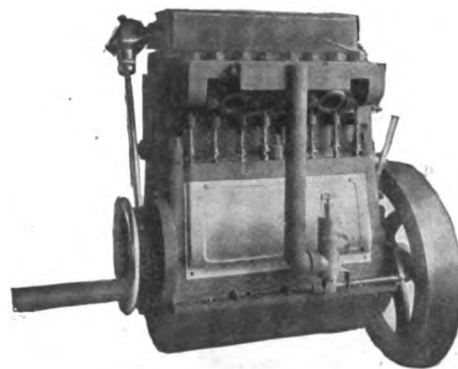
PHILADELPHIA,  
629-33 N. Broad St.



**LIGHT. POWERFUL. RELIABLE.**

**FOR  
Gasolene Motors**

**FOR TONNEAU AND EVERY  
OTHER STYLE VEHICLE.**



Write

**BUFFALO GASOLENE MOTOR CO.,**  
9 Bradley Street, BUFFALO, N. Y., U. S. A.

**STEADY. SPEEDY. ECONOMICAL.**

EXHIBIT AUTOMOBILE SHOW.

EXHIBIT SPORTSMAN'S SHOW.

### Manipulation of the Clutch Mechanism.

The clutch and its treatment are of the utmost consequence, durability of engine and car alike being largely dependent upon the proper design and manipulation of this important structure.

The clutch is the medium by which the throbbing life of the motor is transmitted to the rest of the mechanism. Driving, as it does, the road wheels of the car, its application should be gentle, yet certain and positive in action.

Clutches are of many types, but all aim at positive drive with instantaneous action, yet at the same time power must be so graduated as to permit of starting being gradual, in order that the car mechanism may not be strained. For this reason a friction clutch is usually preferred, the most common arrangement being a hollow cone on the motor shaft, and on the transmission shaft a solid cone, the outer surface of which exactly fits the inner surface of the hollow cone, the two surfaces being normally held in contact by the action of a powerful spring.

The driver by means of his clutch pedal is able to so compress this spring as to immediately throw the engine out of gear, the endeavor of the spring to resist the action of the pedal lever providing the necessary delicacy of touch on again making engagement between the two portions of the clutch.

Many drivers, however, wholly ignore the necessity for this gradual feeding in of the clutch, while others are known even to be in the habit of throwing the clutch suddenly into full gear, and at the same time operating the accelerator, thus subjecting the whole vehicle to a series of sudden jerking strains eminently injurious.

Very little mechanical knowledge is required to demonstrate the folly of such methods, but a consideration of the inevitably injurious effects will be of use. In the first place, the momentum of the motor is so abruptly checked as to place a tremendously increased stress on the connecting rod and crank shafts, with danger, of course, of breaking or jamming. As the engine recovers, or takes up the drive, the shock is felt throughout the entire transmission mechanism, any part of which is liable to succumb,

but gear wheel teeth in particular are frequently broken from this cause.

Assuming, however, that motor and gearing withstand it, the shock is thrown directly upon wheels and tires, and the method of driving and the efficiency of the clutch have probably more to do with the widely varying performance of the pneumatic tire than has any other cause.

Apart from the ruinous effect on the tires, wheels have been known to be torn to pieces, especially when belonging to the lighter type of artillery or wood wheel, for these, though extremely rigid in imparting the drive, have but a small elastic limit, and torsional and shearing strains eventually splinter the spokes at the bolt connection or tear them loose at the hub. There will thus be seen the immense differences in the strength and durability of a car according as it is properly or improperly driven, and that, apart from the danger of skidding, it is most essential that the clutch should be maintained in good order.

Some forms of clutch have both engaging surfaces of steel; in others dissimilar metals, such as steel and phosphor bronze, are used. Again, one surface may be of steel and the other a leather or fibre band.

Where both surfaces are of metal it is necessary to guard against much oil getting on the surfaces, as in such case the clutch will slip and allow the engine to race without imparting motion to the car. Another cause of slipping is due to unequal wear of the metal, so that the surface contact becomes insufficient to take up the drive. From this aspect leather or fibre lined clutches are to be preferred.

So soon as it is found that imperfect starting is due to defective clutch mechanism an examination should be made and the fault immediately remedied.

With judicious driving a good car should be capable of being started as gradually as a railway locomotive.

### Brooklyn Wants an Automobile Squad.

An automobile squad, to be used for running down nocturnal robberies, is suggested by a Brooklyn paper. The ability to get around at high speed and to be always ready are assigned as reasons for the choice.

### Grim Sidetracks his own Bill.

Nowhere but in Pennsylvania could such an atrocious measure as the Grim automobile bill have passed third reading in the Senate. This was done, however, almost before motorists realized their peril.

Headed by the Automobile Club of Philadelphia, however, they rallied in opposition, and a stop was put to the railroading of the bill. For the first time Senator Grim, who comes from Doylestown, in the northeastern part of the State, seemed to realize what the effect of his bill would be if passed. Convinced apparently that in the face of the storm of opposition aroused, it could not pass, he recommended its recommitment to the Judiciary General Committee for further consideration. Here, it is said on good authority, it will repose peacefully and safely until the legislature adjourns.

The Grim bill, which was reproduced in full in these columns a few weeks ago, imposed such intolerable restrictions and penalties on the users of automobiles that it practically legislated them out of the State.

There are several other measures pending in the Pennsylvania legislature bearing more or less directly on automobiles. It is believed, however, that all of them will fall of passage.

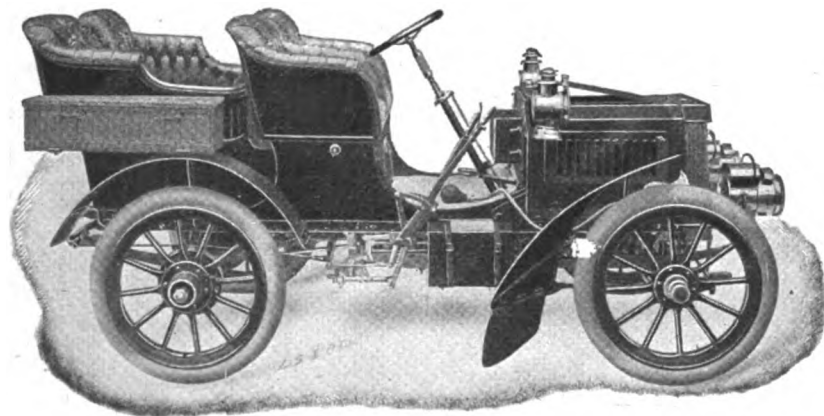
### York has Yearnings.

York, Pa., thinks it may soon have an automobile factory "in its midst." Secretary Geesey, of the Merchants' Association, has received a letter from a concern, name not stated, which proposes to build a factory for the manufacture of automobiles. With that object in view information is desired as to York's natural advantages, facilities and conveniences as a manufacturing city.

### To the Mammoth Cave in Automobiles.

A 1,500 mile trip is being planned by a number of members of the Chicago Automobile Club. The project is to tour to the Mammoth Cave, Kentucky, starting on June 25 and returning July 7. Already forty members are said to have signified their intention of taking part in the event.

Gasolene is the sure enemy of rubber, and will soon rot and destroy it.



Style "F." Type 6.

# The Peerless.

## THE CAR TO HAVE

Is the Car which is

**POWERFUL, SIMPLE, BEAUTIFUL—THE PEERLESS IS IT.—IT IS PEERLESS.** In Mechanical Construction, Ease of Operation, and Grace of Lines.

Questions will Save You Money. Send for Catalogue.

**THE PEERLESS MOTOR CAR CO.,**  
CLEVELAND, OHIO, U. S. A.

# H. B. SHATTUCK & SON,

BOSTON, MASS.

Distributors of

# Oldsmobile, Packard, Autocar, Searchmont

WE HAVE CONSTANTLY ON HAND  
CHOICE BARGAINS  
IN SECOND-HAND MACHINES

A full line of standard French  
and American accessories  
carried in stock

STATE YOUR REQUIREMENTS. WE CAN  
MEET THEM, IF ANYBODY CAN.

## Ireland Increases Automobile Speed.

Beginning April 1 a new law fixing the maximum speed of "light locomotives"—that is, motor vehicles—at fourteen miles an hour takes effect in Ireland. Previously the rate was the same as in Great Britain—twelve miles, as fixed by the act of 1896.

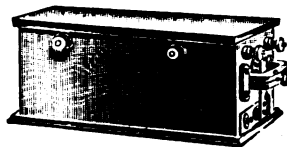
The new regulations fix the maximum speed limit at fourteen miles an hour, with the provision that the light locomotive shall not be driven at any speed greater than is reasonable and proper, having regard to the traffic on the highway, or so as to endanger the life and limb of any person or to the common danger of passengers. In towns and villages the speed must not exceed six miles an hour. Another new provision is that the driver of a light locomotive shall not quit the machine without having taken due precautions against it being started in his absence.

"IT STARTS FROM THE SEAT."  
—THE—  
**"STEVENS-DURYEA"**  
HIGHEST TYPE OF GASOLINE CAR  
J. Stevens Arms & Tool Co.  
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**BELL & COMPANY,**  
**Automobile Garage,**  
Specially designed building for storage  
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Are made in all sizes and Styles for  
Automobiles, Motor Cycles and Gasoline Engines.  
Send for Catalogue and Prices.  
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**NEW PROCESS  
PINIONS**

Greatly reduce noise and vibration and make  
a strong talking point in selling an  
automobile. Better try them.

WE ALSO MAKE METAL GEARS.

The New Process Raw Hide Co.  
SYRACUSE, N. Y.



The pleasure of going  
when and where you wish  
safely, smoothly, silently,  
without elaborate prepara-  
tion or tiresome interruption  
is characteristic of

## NATIONAL ELECTRIC VEHICLES

Perfection of service due to  
extreme simplicity of construc-  
tion. A child can operate a  
"National." Peculiarly the  
"ready" automobile for  
practical, every day,  
all-the-time use.

Write for catalogue showing wide  
variety of latest electric vehicles  
NATIONAL MOTOR VEHICLE CO.,  
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THIS 1/2 page has been run-  
ning in high-class publica-  
tions of general circulations. This  
helps sell NATIONALS. Better get  
the agency.

National Motor Vehicle Co.,  
INDIANAPOLIS, IND.

## The Week's Patents.

723,071. Double Acting Four Cycle Explosion Motor. Albert Thiery, Marcinelle, Belgium. Filed May 2, 1902. Serial No. 105,653. (No model.)

Claim.—1. In a double acting explosive motor, the combination of a suitable frame, two cylinders mounted on the frame, a piston having its ends extending into both said cylinders, an arm attached to and projecting radially from the piston about the middle of its length, a cranked shaft journaled in bearings on the frame and extending transversely of the piston, connections between said radially projecting arm and said shaft, whereby the latter is rotated as the piston is reciprocated, auxiliary pistons moving transversely of the main piston and controlling the admission of explosive charges to the cylinders, a counter-shaft, a drum secured to the countershaft and having a cam groove formed therein, levers connected to the auxiliary pistons and each having a stud extending into the cam groove on said drum, and gearing connecting said counter shaft and the shaft driven by the main piston, substantially as and for the purpose described.

723,090. Steering Mechanism for Motor Vehicles. Robert Watson, Washington, D. C., assignor to Patrick J. Collins and Christopher G. Boland, Scranton, Pa. Filed August 22, 1902. Serial No. 120,691. (No model.)

Claim.—1. In a motor vehicle the combination with a pair of pivoted axles, of a movable bar having a sliding connection with both of said axles, the parts of the axles which are connected to the bar lying normally in directions oblique to the line joining the connecting points of the bar.

723,111. Exhaust Muffler. Alexander Winton, Cleveland, Ohio. Filed December 2, 1901. Serial No. 84,341. (No model.)

Claim.—1. A muffler having a muffling chamber provided with a muffling escape, and a yielding relief valve independent of said muffling escape.

723,160. Mechanism for Automatically Operating Exhaust Valves on Explosive Engines. James E. Jones, Richmond, Ind. Filed January 21, 1902. Serial No. 90,689. (No model.)

Claim.—1. In an automatic mechanism for operating the exhaust valve on explosive engines, of the auxiliary cylinder (11) attached to and communicating with the cylinder of an engine, a piston adapted to slide in the auxiliary cylinder operated in one direction by the pressure in the main cylinder and in the opposite direction by a spring (27), the cylinder (11) provided with a slot (12) extending in from the open end thereof, and a channel extending around the inner surface of (11) and communicating with the pipe (13), reaching therefrom to the exhaust chamber, all substantially as shown and described and for the purposes specified.

723,168. Propelling Means for Automobiles. Hermann Lemp, Lynn, Mass., assignor to General Electric Company, a Corporation of New-York. Filed November 2, 1900. Renewed August 16, 1901. Serial No. 72,320. (No model.)

Claim.—1. The combination of an internal combustion engine, a dynamo electric machine driven thereby, a storage battery connected to said dynamo electric machine, a second dynamo electric machine, and a differential gearing to which both dynamo electric machines are connected.

723,209. Armor for Pneumatic Tires. Harry Parsons, London, England. Filed Dec. 17, 1902. Serial No. 135,544. (No model.)

Claim.—1. Antislipping or protecting means for the peripheries of wheels, pulleys or the like, comprising attaching elements at opposite sides of the wheel, and an antislipping or protective medium secured to the attaching elements and extending across and around the periphery of the wheel, said parts being disconnected from though retained on the wheel whereby the antislipping or protective medium is free to move or shift its position around the periphery.

723,326. Armored Element for Electric Batteries. Elmer A. Sperry, Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J., a Corporation of New Jersey. Filed May 25, 1901. Serial No. 61,848. (No model.)

Claim.—1. An armored battery element comprising a plate or grid, active material, and a fabric which is attached to and incorporated with said active material, said active material extending through the interstices of said fabric and forming substantially the surface of the electrode.

723,327. Storage Battery. Elmer A. Sperry, Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 12, 1901. Serial No. 71,710. (No specimens.)

Claim.—1. A composition for storage battery elements consisting of finely divided metallic lead moistened with a mixture of a neutral liquid and ammonium hydroxid.

723,328. Storage Battery. Elmer A. Sperry, Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 12, 1901. Serial No. 71,711. (Specimens.)

Claim.—1. A composition for storage battery elements consisting of active material, ammonium sulfate and a catalytic agent.

2. A composition for storage battery elements consisting of active material, ammonium sulfate and alizarin.

723,329. Manufacture of Envelopes for Storage Batteries. Elmer A. Sperry, Cleveland, Ohio, assignor to National Battery Company, Cleveland, Ohio, and Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 12, 1901. Serial No. 71,712. (No model.)

Claim.—1. The process of preparing fiber or fabric for storage battery envelopes which consists in subjecting the fiber or fabric to a nitrating mixture composed of about one hundred and thirteen and one-half parts of nitric acid of 1.42° gravity and about one hundred and fifty parts of sulfuric acid of 1.84° gravity at a maximum temperature of about 78° Fahrenheit, whereby the carbohydrates other than the starchy carbohydrates are nitrated and the starchy carbohydrates are not nitrated and subsequently washing out the fiber or fabric.

723,399. Device for Filing Commutators for Dynamos or Motors. Joseph B. MacIntosh, Lexington, Mass. Filed July 10, 1902. Serial No. 115,017. (No model.)

Claim.—1. A device for filing commutators while still in place in a motor or dynamo, comprising a file holder having means adapted to be engaged by the yielding brush holding fingers of said dynamo or motor, and a file yieldingly carried by said file holder.

723,449. Electrode for Storage Batteries. Thomas A. Edison, Llewellyn Park, N. J. Filed Nov. 28, 1902. Serial No. 133,115. (No model.)

Claim.—1. A battery electrode, comprising a plate having an opening therein, a pocket or receptacle secured in said opening and

having a concaved surface, and an active material in said pocket or receptacle, substantially as set forth.

723,450. Reversible Galvanic Battery. Thomas A. Edison, Llewellyn Park, N. J. Filed Nov. 28, 1902. Serial No. 133,116. (No model.)

Claim.—1. A reversible galvanic battery employing an alkaline electrolyte and whose oxidizable element on discharge is composed of an electrolytically active insoluble material mixed with mercury for the purpose of preserving contact between the particles of the active material, the latter being more readily oxidizable than mercury, as and for the purposes set forth.

723,451. Storage Battery. Justus B. Entz, Philadelphia, Pa., assignor to Electric Storage Battery Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 28, 1900. Serial No. 28,344. (No model.)

Claim.—The combination with a compartment of a plate having a hooklike terminal that extends opposite the face of the plate whereby the wall of the compartment is clamped between the bill of the hook and the face of the plate so that the latter is held to place in respect to the walls, substantially as described.

723,487. Carbureting Device for Explosive Engines. Thomas J. Richards, Franklin, Pa. Filed Oct. 18, 1901. Serial No. 79,183. (No model.)

Claim.—1. In an apparatus of the character described, the combination with a carbureting chamber having supply and overflow pipes leading into and therefrom, with a gas draw-off pipe provided with a suitable valve, air inlet pipes adapted to be detachably connected with a heated air supply, whereby heated air may be delivered to said carbureting chamber when the oil is stiff, and which when desirable may be disconnected from the heated air supply, to supply air of the normal temperature as set forth.

723,502. Internally Fired Engine. Elihu Thomson, Swampscott, Mass. Filed Feb. 28, 1898. Serial No. 671,963. (No model.)

Claim.—1. In an internally fired engine, the combination of a cylinder, a fire space which communicates with the cylinder through a passage that is always open, a piston arranged to draw in a charge of air on its forward stroke, a valve controlling the admission of the charge, means for closing said valve on the compression stroke of the piston, a compressed air compartment communicating with the cylinder space, means for interrupting the communication between the compartment and the cylinder space on the second or power stroke of the piston, whereby the compressed charge of air is sent through the fire space on its return to the cylinder space, means for supplying fuel to said fire space, and means for exhausting the return charges on the second return stroke of the piston.

723,503. Internally Fired Engine. Elihu Thomson, Swampscott, Mass. Filed Feb. 6, 1899. Serial No. 704,710. (No model.)

Claim.—1. In an engine, the combination of a piston and cylinder, means for injecting a slightly compressed charge of air into the cylinder at or about the completion of the piston stroke, a compression space opening into the cylinder wherein the charge is further compressed by the movement of the piston, a fire space or chamber communicating with the compression space and the cylinder, and means for closing the opening between the compression space and the cylinder whereby the charge is compelled to pass through the fire chamber and be heated on its return to the cylinder.



### Purposes of Proposed State Club League.

In pursuance of the object of effecting an organization of New York State automobile clubs, the committee of the Syracuse Automobile Club has sent out a letter outlining the project. The letter asks for expressions of opinion on the plan of calling a convention at Syracuse in the near future for this purpose.

"It is not the purpose of the proposed organization to antagonize in any way the National Association as it now exists, or any other existing automobile club or organization, but to knit them together in a common interest," the letter states.

"The primary purpose of the State association will be to secure legislation to improve the highways of the State, and also concerning other matters of interest to automobilists. It is believed that a State association, comprising all or practically all the automobile clubs of New York State, could wield a much more potent influence upon members of the State legislature than could scattered clubs working individually and without a uniform purpose. Having a common purpose clearly defined, it will be possible for every club throughout the State to bring to bear upon their respective members of the legislature an influence that will secure recognition."

### Lays its Own Track.

Another non-skidder, this time combined with a puncture preventer, has been brought out in England.

It consists of an endless band of steel mesh work, or other suitable material, arranged so as to pass round the periphery of the tire on the driving wheels, and from thence round a ball bearing pulley affixed to the side of the car, and adjacent to the road wheels in such a manner that as the motor is propelled along the endless bands will form tracks upon which the road wheels travel. The band is of U shape in cross section, so as to obtain a grip on the tire, and is lined with a suitable material in order to minimize any chance of undue wear on the tire. By means of guide pieces on the road wheels any likelihood of the band slipping off when the tire is subjected to any sudden

side strain is entirely eliminated. A car so fitted may be said practically to lay its own rails as it goes along.

It is also the idea of the inventors, if possible, to drive the car direct by means of these bands by attaching pulleys to the countershaft, thus doing away with the usual driving chain, and utilizing the bands for driving, and preventing side slip and punctures at one and the same time.

### At a Mile a Minute Pace.

It is no child's play to ride in a racing car travelling at the rate of fifty or sixty miles an hour. On the straight stretches of road the speed exceeds that of the express train, and during every moment of the contest the lives of those in the car depend on the skill, nerve and judgment of the driver, and on the absolute soundness and strength of the mechanism. The very air pressure, unless one has got used to it by long experience, is very difficult to stand. It produces a smothering sensation and a feeling of helplessness. Even in a car going at forty miles an hour the feeling is very thrilling; and when two cars are racing at this pace the dust is terrible for the rearmost car, and the dashing through the stinging and blinding clouds is a most exciting performance.

### "Strikes" Behind Automobile Legislation.

"We believe that many of the automobile measures before the legislature are of the 'strike' order, and not in the interests of the public," says the Newton (Mass.) Graphic. "The automobile has come to stay, and the public will have to adjust itself to the new conditions, as it did when electric streetcars were first introduced. Reasonable regulations as to speed and a complete system of registration and identification, with a possible plan for licensing operators, are all that present conditions demand."

### Gates Order Mors Cars.

John W. Gates and his son, Charles G., have ordered two 1903 Mors cars from Paris. One is an 18 and the other a 24 horsepower. They are due here in a few days.

### Peculiarities of Dogs and Chickens.

Dogs and chickens are twin evils that the motorist has learned to dread. Nor is it easy to say which takes precedence.

The chicken is the stupider of the two, and can be depended upon to get into trouble if it gets near a swiftly moving car. It will stand in the middle of the road and do its best to defeat the endeavors of the operator to avoid it. If he drives straight ahead the chicken will stand still; if he steers to the right or the left the chicken will make a frantic dive in the same direction, wings outstretched, neck craned and wild squawks of terror issuing from its throat. But if the car prove the juggernaut that puts an end to its existence, no material harm—save to the biped—is likely to result. A small body like that of a chicken is likely to be tossed aside without injury to the car.

Dogs are considerably worse in this particular. If one is struck he may break or bend something, or cause the driver to lose control of the steering. On the other hand he is less likely to be struck. He may run after the car and bark at it, but it is only when he makes a miscalculation of the speed or of the distance that he comes in contact with it.

### No Ride, no Vote.

An English "by election" last week again demonstrated the popularity of the automobile. A parliamentary seat in the Chertsey division of Surrey (London) was so hotly contested that it was dubbed the "motor car election." Premier Balfour, Lord Rothschild and other prominent persons lent their cars for the occasion, and the anxiety of rural voters to obtain a ride in a motor car was among the amusing features, many of them refusing to go to the polls unless cars were sent to their homes to fetch them.

### Preparing Gear Grease.

Gear-box grease should always, previous to use, be mixed with lubricating oil until the whole is of the consistency of treacle. If grease alone is used the gear wheels merely cut a path through it, and no efficient lubrication takes place.



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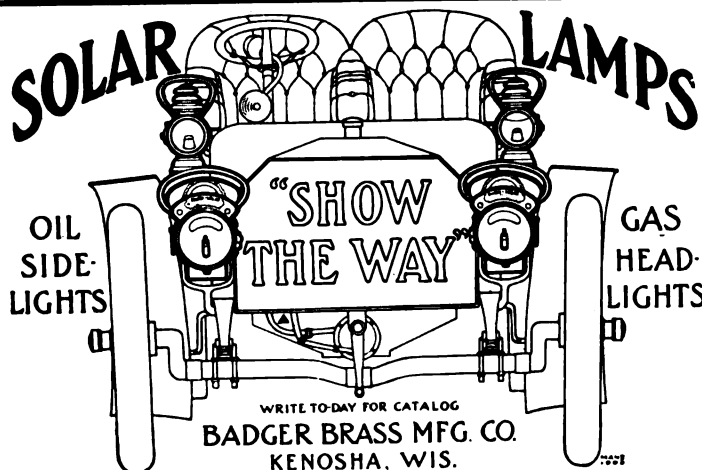
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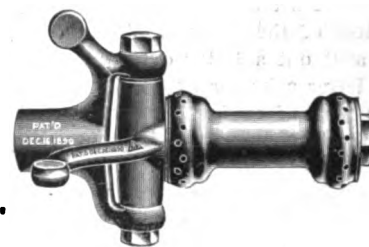
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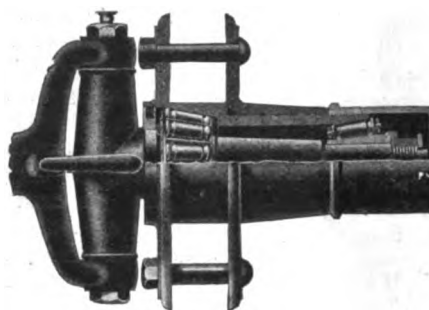
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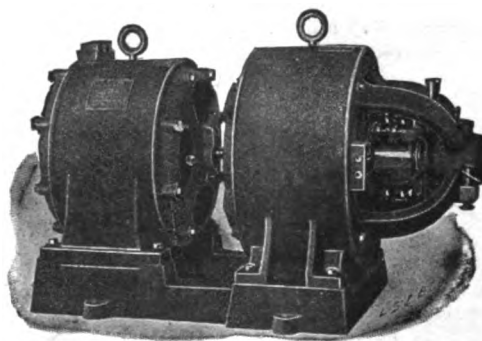
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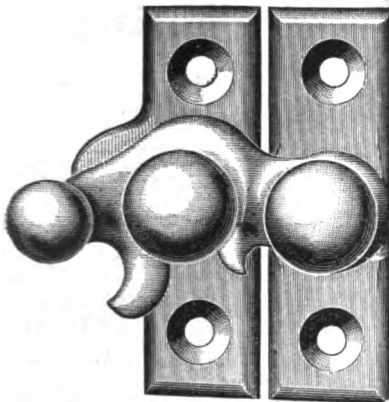
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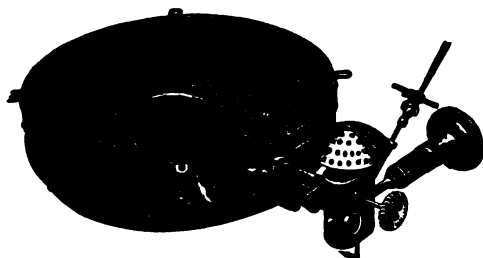
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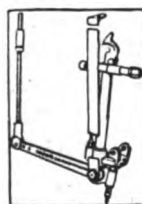
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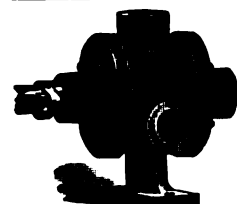


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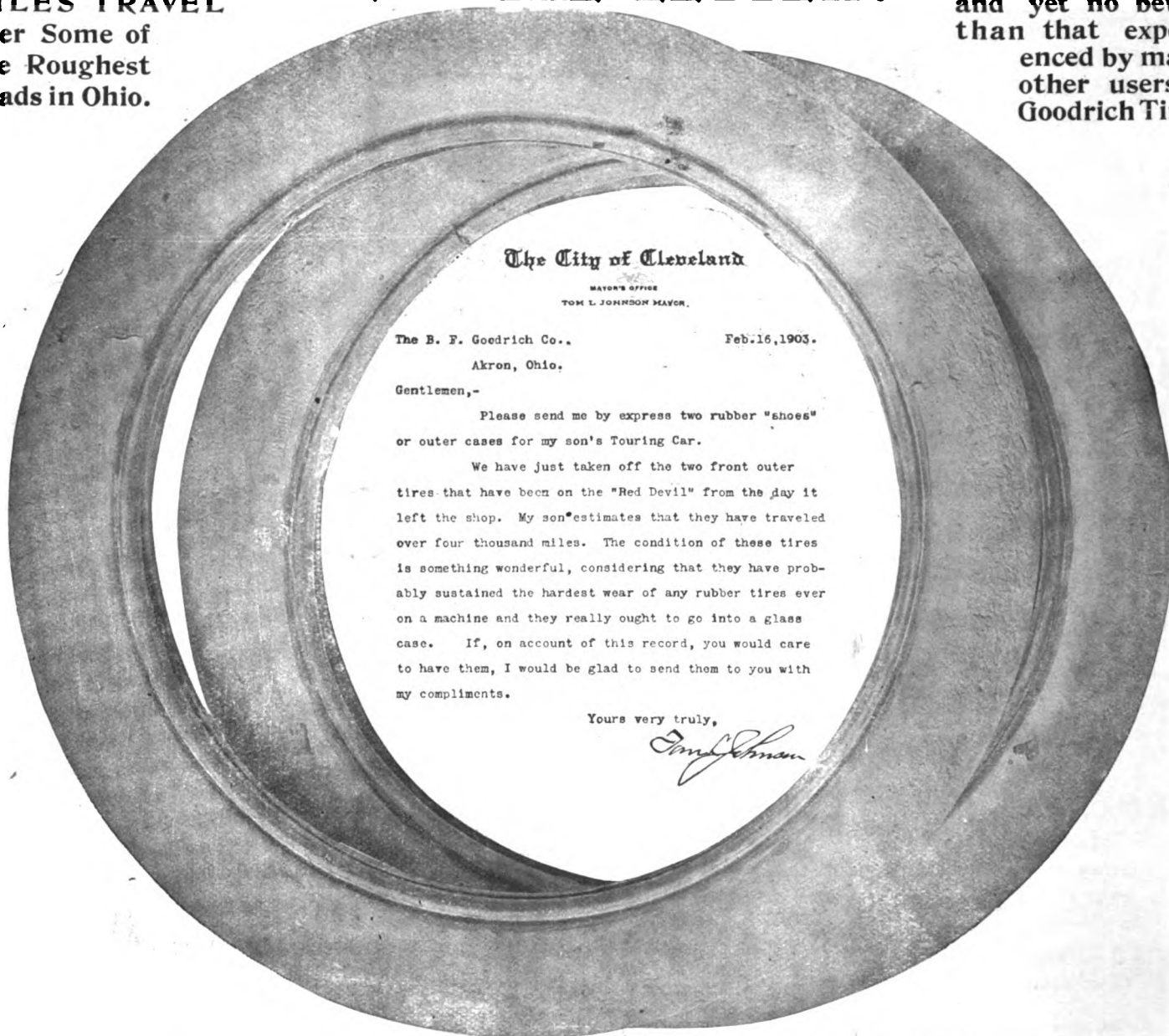
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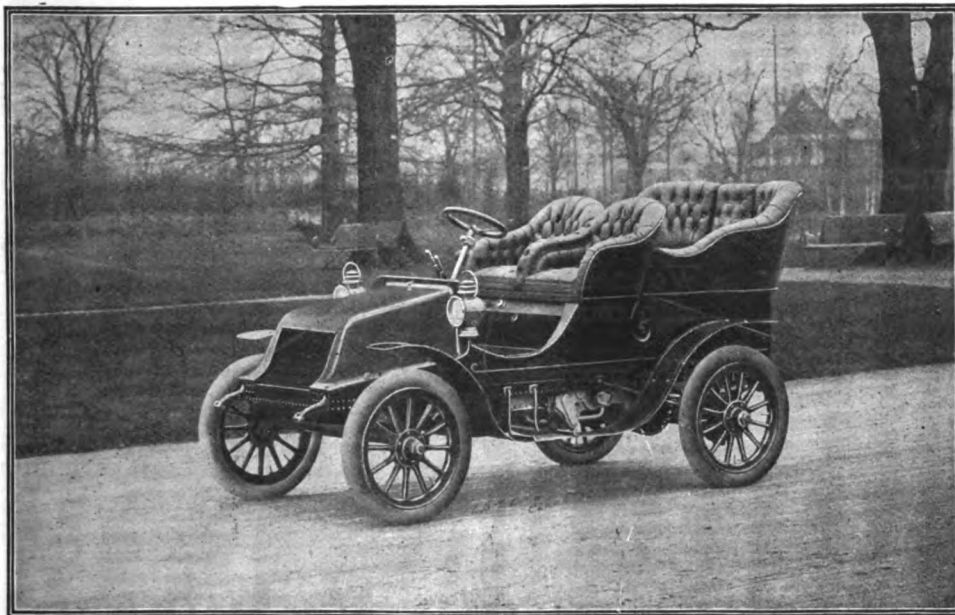
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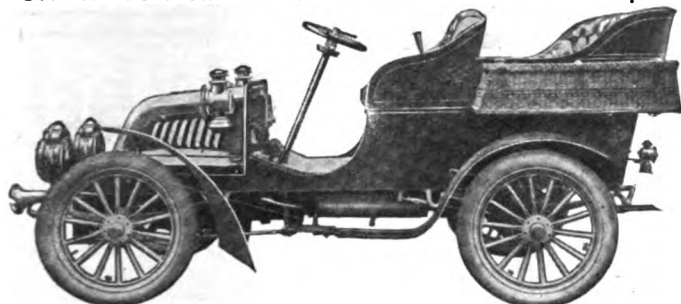
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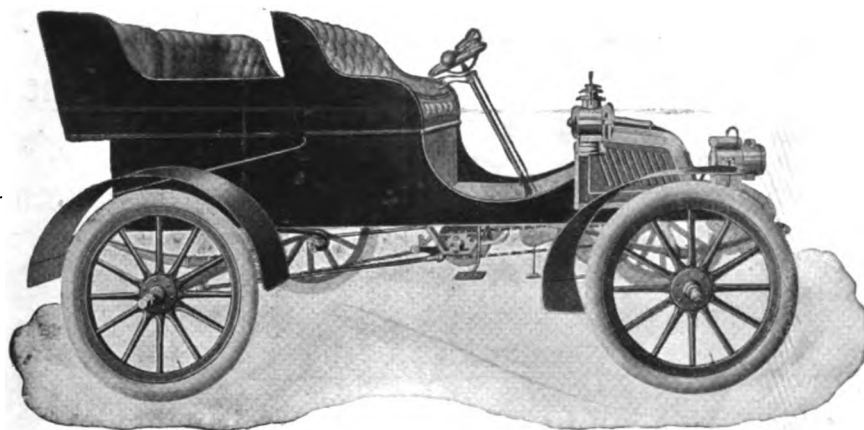
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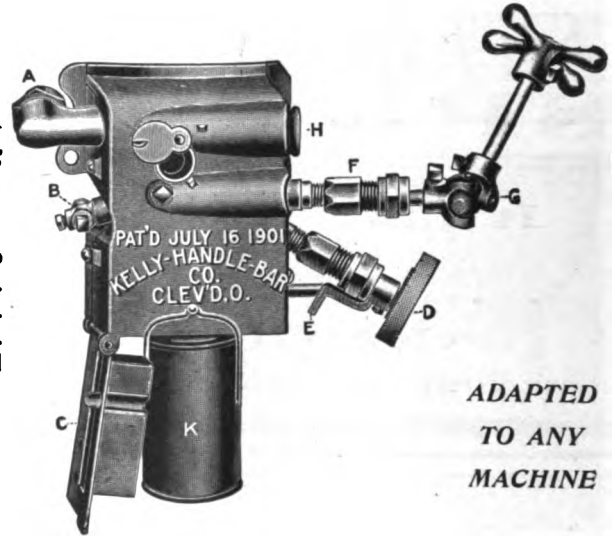
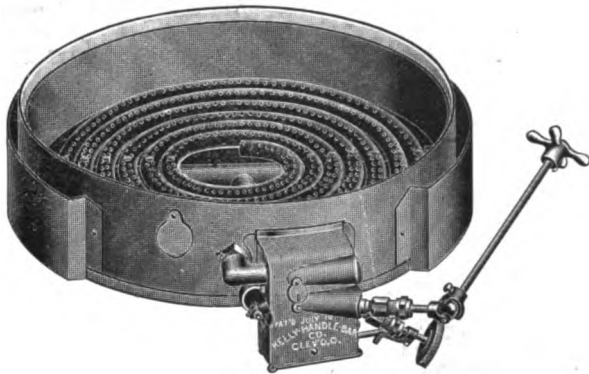
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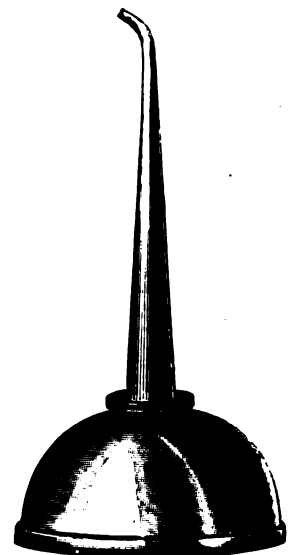
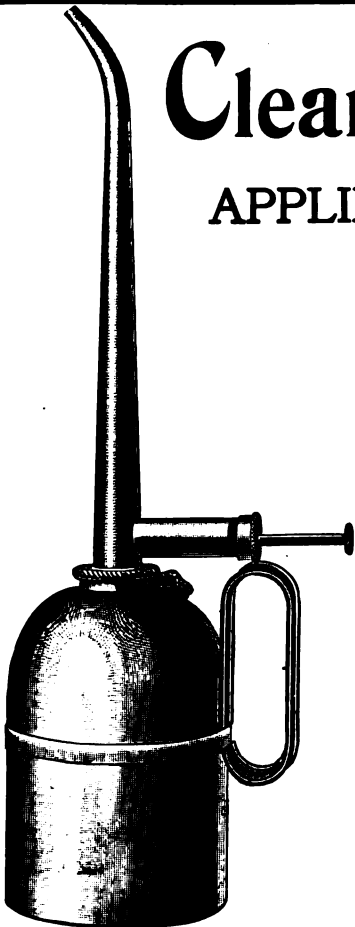
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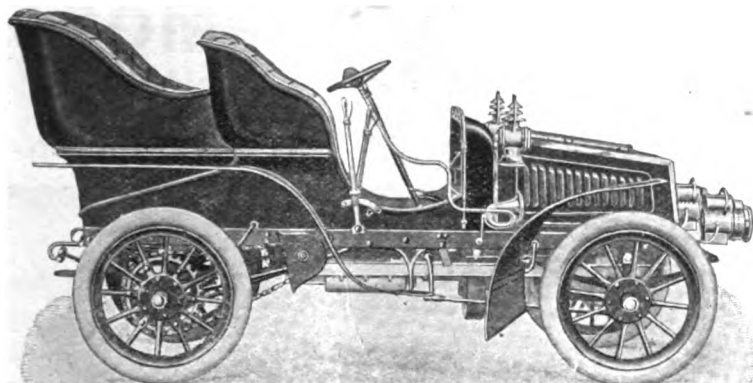
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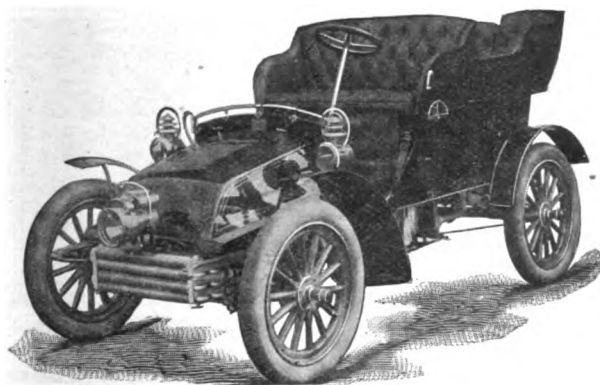
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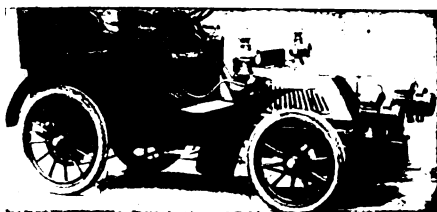

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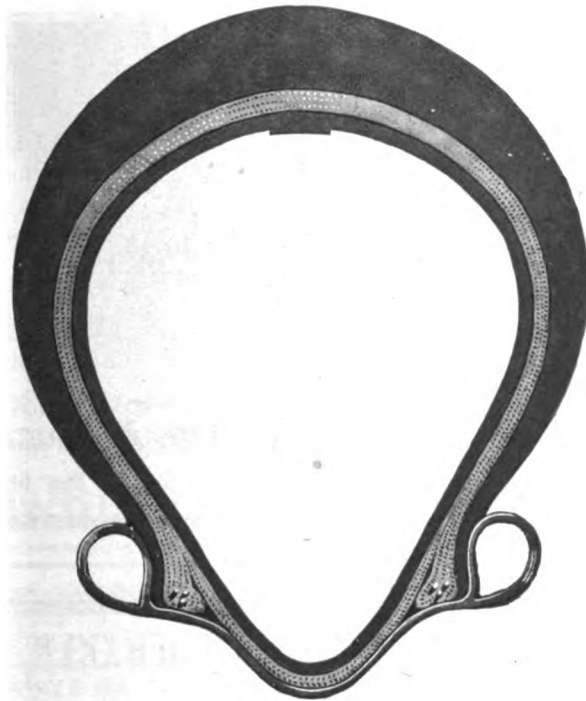
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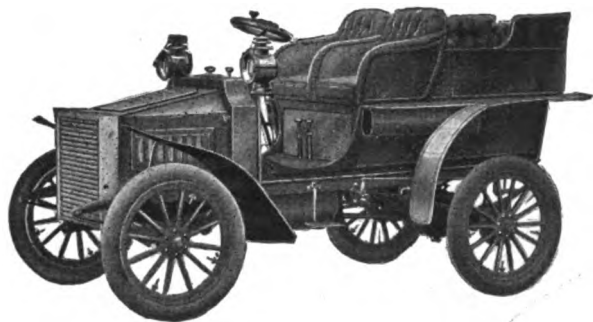
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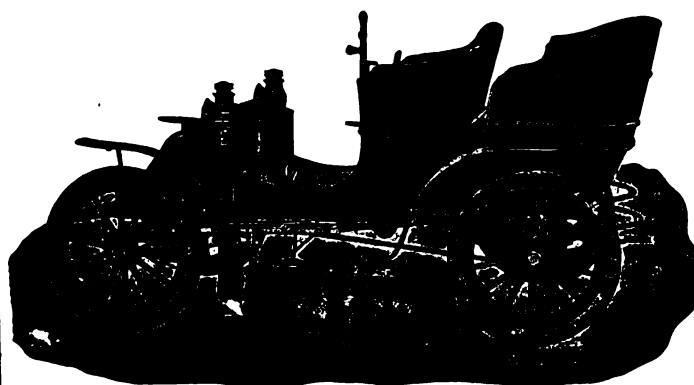
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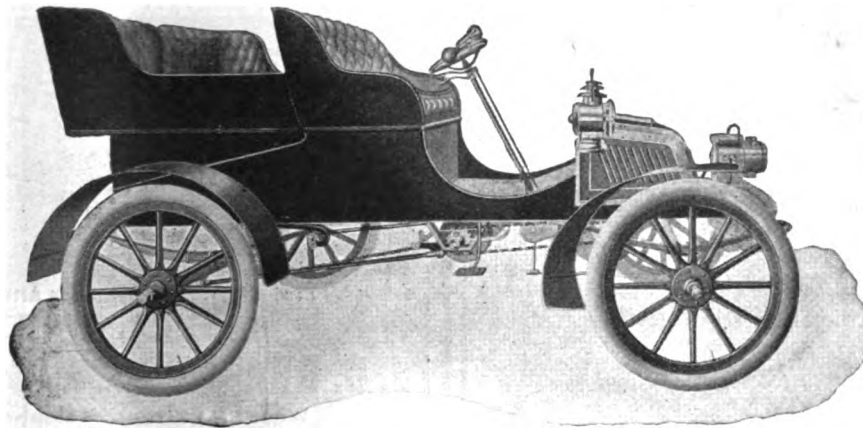
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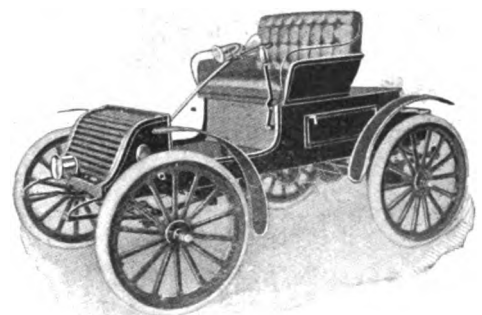
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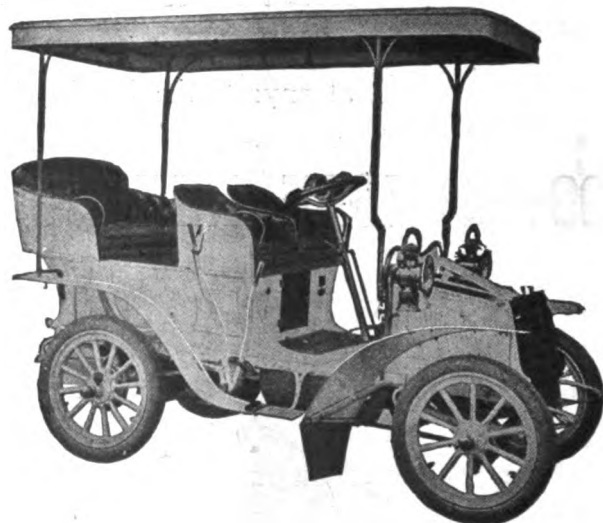
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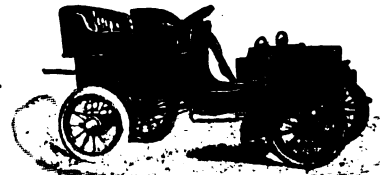
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San Francisco, A. E. Brooke Ridley, 18 Fell Street.  
Binghamton, Binghamton Automobile Station, 259 Water Street.  
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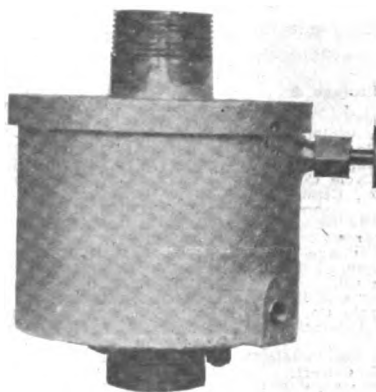
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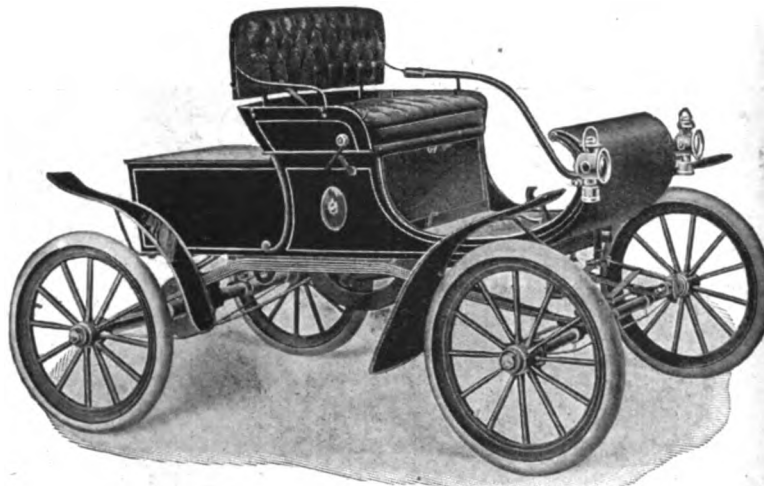
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RELIABLE.**

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TUCSON, ARIZ.—Seager & Close.

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GERMANY—Ernest Weigaertner, Berlin.  
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NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
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ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingle & Co., Johannesburg and New York.  
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FACTORIES: DETROIT AND LANSING, MICH.

# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, April 23, 1903.

No. 4

## MAY AFFECT MANY AGENTS

**Admission That Members of Selden Association  
Have Discussed and Contemplate Drawing  
the Line Sharply.**

It leaked out late last week, after the meeting of the executive committee of the Association of Licensed Automobile Manufacturers had adjourned, that the attitude of the organization toward the agents for unlicensed cars had been seriously discussed—that is, whether or no dealers would be permitted to handle both licensed and unlicensed vehicles.

When General Manager Day was asked concerning the matter he frankly admitted that the subject had been talked of, and, although no decision was arrived at, he intimated quite broadly that it was extremely probable that the members of the association would shortly draw the line and confine their agencies exclusively to dealers handling licensed cars.

Mr. Day said further that several of the more important agents had expressed themselves as unqualifiedly favoring a policy of the sort.

### Cadillac and Northern get Licenses.

Selden licenses were this week issued to the Cadillac Automobile Co. and the Northern Mfg. Co., both of Detroit. They were two of the three concerns whose applications were favorably acted on last week by the executive committee of the Association of Licensed Manufacturers. The third of the trio has not yet paid its "inflation fee" of \$3,500.

### Toledo Trade Added to.

The Kirk-Hall Co. has been formed and opened a salesroom and garage at Nos. 713 and 715 Jefferson street, Toledo, Ohio. E. A. Kirk and Charles M. Hall comprise the firm, and Yale, Oldsmobile and Waverley cars will be handled.

The Association of Licensed Automobile Manufacturers yesterday took possession of its new offices at No. 7 East Forty-second street. General Manager Day is, of course, now located there.

## For Wisconsin Folk Only.

One novel feature will be possessed by the automobile show to be held beginning May 4 by the Wisconsin Association of Automobile Manufacturers and Dealers. It is the intention to limit exhibits to "those makes of machines gotten out by manufacturers who have agents in the State and to the automobile manufacturers of Wisconsin." This will prevent the encroachment of other concerns upon the territory of the present dealers.

The show is to be held in the Broadway Armory, Milwaukee. R. C. Forrer and Fred. Patee have been named as a committee of arrangements.

## Court's Illness Postponed Sale.

Confirmation by the court of the receivers' sale to the Pope Mfg. Co. of the assets of the American Bicycle Co., which carries with it the International Motor Car Co. and the Federal Mfg. Co., which was set for Monday last, 20th inst., did not occur, owing to the illness of the judge. The lawyers and others interested had gathered in the United States Court at Trenton, N. J., when word was received that Judge Kirkpatrick had suffered an attack of heart trouble, necessitating postponement of the case for one week.

## Not an Exclusive License.

Some of the public prints have stated that the Selden license issued to the Charron, Girardot & Voigt Co. of America, "formerly Smith & Mabley," was of a special character, granting to them the exclusive right to sell imported cars in this country. This is not, however, the case. It is the only license of the sort yet issued, but it is expected that several others will shortly be arranged with leading importers.

## May Reorganize Woodruff.

It is planned to reorganize the Woodruff Automobile Co., of Akron, Ohio, and to increase its capital stock from \$50,000 to \$500,000. Subscriptions are being solicited in Akron and other places, and it is said that success is attending them. It is intended to make A. M. Woodruff, the present manager, general superintendent of the new company.

## ALL THREE WILL GO

**Winton, Owen and Mooers Formally Named to  
Compete for Cup—Monday's Trials De-  
velop Mainly Irritating Incidents.**

Cleveland, the largest automobile manufacturing centre in the United States, will furnish the cars that will represent America in the international race for the James Gordon Bennett trophy on July 2.

Two Wintons and a Peerless, to be handled respectively by Alexander Winton, Percy Owen and Louis P. Mooers, have been selected to form the team by the race committee of the Automobile Club of America.

At last all is determined and the details known, and there is surcease of turmoil and anxiety for all. The team was settled upon Monday morning at the Garden City Hotel, after a second unsuccessful attempt had been made to get a creditable showing out of some other candidate car than the Winton of Percy Owen. That entry has "made good," and it is the only one of the six cars of four different makes entered in the lists of the Automobile Club that has done so.

The car entered by Alexander Winton was accepted out of hand, he being a recognized builder of racing cars who has been in the cup race before and who first came forward and made possible the sending of a team—reasons good enough. The two cars entered by C. W. Matheson, of Grand Rapids, were reported to the committee as being far from ready when the time for elimination tests arrived. Three cars, those of Percy Owen, L. P. Mooers and H. S. Harkness, reported ready on April 11, but only Owen and Mooers toed the scratch on the morning of April 14, when the starter's whistle blew, and of these two only Owen acquitted himself with credit. Mooers offered a substitute car for his specially built racer of 80 horse power, but the substitute was not supplied with gasoline.

When last Sunday arrived it was believed that Owen, Mooers and Harkness would all be seen the following morning on the six mile course between Westbury and Merrick, Long Island, where the postponed tests were

to be held. Mooers had his big racer ready and Owen his swallowlike Winton, but Harkness failed to appear.

The committee and the two candidates repaired to the course at 6 a. m. and made ready. This time there was an attendance of about forty cars and a couple of hundred spectators on the course. The effort at secrecy having failed, the time and place of the postponed trials were published widely, and, very naturally, the spectators in the touring cars got in the way. Shortly after 6 o'clock Percy Owen, accompanied by Alexander Winton, who had come on from Cleveland for the trials, went for a preliminary spin over the course and back. The weather was bright, the road dry and in fine condition and not a breath of wind stirred the air. It was an ideal day for the tests, and the low, rakish Winton skimmed along with a quietness and smoothness that compelled admiration.

Mr. Mooers and his Peerless were started for the first formal trial at 6:20 o'clock, George Isham Scott riding along as time-keeper. For about three miles the big Peerless car went along very fast, and then the engine began to smoke. It grew so hot that a stop had to be made. The circulating pump was found to be out of order. The Peerless returned to the starting point, near Westbury, and remained there, being ineffectually tinkered with until after the committee had called the trials off and returned to the hotel.

At 6:25 Owen started his Winton from Westbury, accompanied by Dave H. Morris as timer. Going south to Merrick no time was taken because the engine was not warmed up. The arrangements of the committee called for a standing start at Westbury and a six mile run, and a flying start at Merrick, with only five miles timed. The run was limited to five miles' travelling north, because of a turn in the road a little more than five miles from Merrick. Returning north on his first trip Owen made the five miles from a flying start in 5:25. On a second round trip, accompanied by Committeeman Scott, the Winton car made the six mile run from the standing start at Westbury in 7:22 2-5. Starting on the return northward the best time of any trip began to be made. Mr. Scott clocked one mile in 1:04, another in 1:02 and a third in 1:04 2-5. Just after the three mile post had been passed a car with its toaneau full of spectators blocked the course and the racer had to be brought almost to a stop to avoid collision. A third trip was essayed, this time with Mr. Morris timing. Good time began to be made, when the lubricating feed pipe became disconnected. This was due to the carelessness of an attendant who made some adjustments after the second run. Before this trouble was remedied the time limit for using the course had expired, and the committee called off the tests and repaired to the Garden City Hotel, where they went into executive session.

It was rumored on Sunday that the com-

mittee had planned for an endurance test of 200 miles at an average pace of fourteen miles an hour, to follow the speed trials. This was acknowledged by one of the committee on Monday morning to be true. It was somewhat of a surprise therefore when the committee, after its meeting, announced that no more trials would be held, and that Percy Owen and L. P. Mooers had been selected to complete the team. It is understood that the considerations which influenced the committee's action were practically those which the Motor World urged last week, viz.:

Three cars give more chances than one; the Owen car has proven itself sufficiently and thereby has assured the competency of Alexander Winton's entry, as the cars are brother productions; the Peerless factory has a good reputation, and whatever may be now amiss with the Mooers car will doubtless be remedied before the time of the race; to close the lists and accept the two cars on hand is the best thing to do, because any arrangement for future tests would be simply interference with the work of preparation to be done by the candidates.

The full race committee, composed of George Isham Scott, Harlan W. Whipple and Dave Hennen Morris, was present when the decision completing the team was made.

"A. R. Shattuck and servant" were not on the register of the hotel, nor did the pair appear at any stage of the proceedings in the second contest. How the committee managed to reach a decision without the presence of this couple is not known.

All during the morning of the second attempt to hold trials the question most often asked along the course was, "Where is Harkness?" Mr. Harkness had forfeited his right to being considered as a competitor for a place on the team by failing to be on hand last week, but the race committee had extended to him an invitation to try out his racer on the course they had obtained, and he had announced his intention of being present. It was subsequently learned that Mr. Harkness had started with his car from the shop in Brooklyn, where it has been kept, at 4 o'clock on Monday morning. He wanted to travel in the dark, and sought back roads because his car, being fitted with only two speeds, was essentially a law-breaker at its slowest pace. Before he reached Jamaica the temptation to let it out a little was yielded to, and after a bump over a "thank you, ma'am," the car came down on a projecting rock in a way that pounded the radiator and caused a leak. No facilities for repair were at hand on a country road before the dawn, and the car remained in the road while the time for the trials expired, and then it was towed back to the shop. Mr. Harkness says he has made a mile in 50 seconds with his car in a private trial. It is thought he will be named as a substitute on the American team if he will accept the secondary honor.

Alex Winton and Percy Owen were manifestly elated at the Winton getting two

places. Mr. Winton's plans seem to have been matured beforehand, for on the way by train to the city he announced that he and Owen will sail for the other side on the Campania on May 30, and that the two racers, together with the Winton "Bullet" and a touring car, will be shipped on May 23.

The reasons for great secrecy regarding the Winton racers which made information about them meagre a week ago seem to have ceased to exist, for on Monday Mr. Winton was most free about showing every part of the car and answering questions. Following is a more complete description than was before obtainable:

It has a wooden truss frame amply reinforced with steel. No cross reaches are used in the body, it being held together and braced by the radiator, engine, gear box and rear axle, which are built in with it. The wheels are of wood, 32 inches in diameter, with 4-inch tires. The top of the hood that covers the engine in front is only 32 inches from the ground, and it runs perfectly flat from behind a shelving nose in front of the seat for two that is just in front of the rear axle. The engine has four cylinders laid horizontally transversely in the body of the car. They are not opposing cylinders, but four separate ones in a row laid side by side with the explosion chambers at the edge of the car on the right hand side. Each cylinder is of 5¼-inch bore and 6-inch stroke. The fly-wheel for these weighs 125 pounds. The cylinder heads lie a little below the line of the frame with the spark plugs in the centre, and these are covered and protected by an aluminum slide that is fitted over them so as to form a sort of shallow box on the outside of the car. With this slide removed easy access is afforded to all the valves. Every part can be reached without getting under the car. The exhaust pipes, which extend downward from the cylinder heads, are the lowest part of the car, having a clearance of only seven inches from the ground. Aluminum has been used for gear casings and wherever practicable, and all the metal parts not aluminum have been given a coat of aluminum paint. There are two speeds forward and a reverse, the transmission being by a shaft and bevel gears direct to the differential on the rear axle. A conical spring clutch of original design is used that throws out by means of cams. On each hub there is an internal and an external band brake, each of which operates independently, and each throws out the clutch whenever it is operated. The ignition system consists of a storage battery with Splidorf coil and a spark plug that works when covered with oil. One carburettor serves for all the cylinders. The Winton wick feed system of lubricating is employed. The gasoline tank holds fifteen gallons, and there is capacity for seventy-five pounds of water. The wheel base of the car is 100 inches and the tread 4 feet 8½ inches. It is rated at 40 horsepower, and weighs in racing trim 1,750 pounds. The Owen racer was shipped to Cleveland on Monday night.

Concerning the other car entered by himself, Mr. Winton said that it was like Owen's car in looks, but quite different otherwise. He would not be specific about all the points of difference, but said that it is longer, heavier and of greater horsepower.

The Mooers 80 horsepower racer, which was fully described in the Motor World last week, is not the car that will be sent to Ireland for the race, according to George Banker. This he declared emphatically and repeatedly during a lively altercation that occurred on the course on Monday morning.



## STADIUM FOR DEMONSTRATIONS

**Exhibitors at St. Louis Will Have That Privilege—Other Affairs of the Exposition.**

An exception is to be made in the case of automobiles at the St. Louis Exposition next year, the officials having granted permission to show them in operation on a track, a privilege granted to no other exhibitors. The Stadium, which is large and well located, will be used for this purpose. It may be used for automobile demonstration purposes at any time when there are no athletic events in progress.

This privilege has been secured by the National Association of Automobile Manufacturers, which association is also arranging with the Exposition officials to provide a stable or garage for the accommodation of the demonstrating vehicles. It is proposed to erect a building for this purpose near the Stadium, and also near the entrance to the grounds. The expense of this building, however, must be borne by the exhibitors, the Exposition officials feeling that the cost of the Transportation Building and its maintenance is too great to permit any further outlay. The plan of the N. A. A. M., therefore, is to have a simple and yet appropriate design made, and the expense assessed among the exhibitors on the basis of the number of square feet used by each. This was the plan which was followed successfully at the Paris Exposition. Foreign exhibitors will also be permitted to use the stable on the same basis as the American automobile manufacturers, and the Chief of the Department has requested the Commissioners of France and Germany to advise him how much space will be required by them.

The Association expects to learn in a short time the number of automobiles which the American manufacturers will have at St. Louis for demonstration and how much space will be required by them in the stable. This information is necessary before designs and estimates can be made by the Department of Works at the Exposition. The building will have a cement floor and will be thoroughly protected against fire, but the care of the vehicles must be attended to by the individual owners. There will be all the necessary facilities, such as water supply, drainage, electric lighting, current for recharging batteries of electric machines, lockers for caretakers and chauffeurs, and supply of gasoline.

### Paine's Excuse for Assigning.

Last week J. Overton Paine went to the wall, being arrested for contempt of court, and almost immediately filing an assignment for the benefit of his creditors. He gave as one reason for the assignment "heavy losses in automobile and bicycle stocks and factories."

A couple of years ago Paine made an effort to "break in" the automobile industry, but he never passed from the talking to the acting stage.

## The Week's Incorporations.

Syracuse, N. Y.—The Syracuse Automobile & Motor Co., with \$100,000 capital. George E. De Long is the incorporator.

Brooklyn, N. Y.—Brooklyn Automobile Co., under New York laws, with \$25,000 capital. Directors—L. A. Hopkins, S. H. Hunt and L. R. Adams.

Jersey City, N. J.—Royal Automobile Co., under New York laws, with \$250,000 capital, to manufacture motor vehicles. Incorporators: Louis B. Dailey, Warren N. Akers and K. K. McLaren, all of Jersey City, N. J.

Buffalo, N. Y.—Electric Automobile Club, under New York laws, with \$500 capital, to store and repair electric vehicles. Directors—Van Loan Whitehead, Lauren W. Pettebone, Edward J. Meyer, William Y. Warren, Samuel J. Dark, Joseph P. Fell and Frederick B. Robins.

Portland, Ind.—The Jones Cycle & Automobile Co. of Portland, with \$2,500 capital. Corporators—F. Bimel, J. A. Richardson, Will Detamore, S. H. Adams, L. G. Holmes, A. V. Jones, J. A. M. Adair, E. M. Haynes, J. A. Jaqua, R. H. Hartford, Byron Jones, E. S. McGriff and C. D. Ames.

### To Deal With Chauffeur Question.

Committees to deal with the chauffeur question have been appointed by the Automobile Club of America, the American Automobile Association and the National Association of Automobile Manufacturers, and, pursuant to the idea put forth in the Motor World, the personnel of the three committees has been made sufficiently alike to make it in effect a joint body. The club has appointed a committee of four, the A. A. A. has appointed the same four and the Manufacturers' Association has named three, one of whom is on both the other committees. This gives a working committee of seven, with the same majority of four representing the club and the national organization. The committees are composed as follows: Automobile Club and American Automobile Association, E. B. Galleher, George F. Chamberlin, Clarence M. Hamilton and Dave H. Morris; N. A. A. M., E. B. Galleher, F. M. Lande and Paul Deming.

### Coming of the Clarkmobile.

An addition to the "mobile" family is the Clarkmobile, made by the Clarkmobile Co., Lansing, Mich. It is a single cylinder gasoline runabout, developing 6½ horsepower and selling for \$750.

The company has been incorporated with \$50,000, and has the following officers: A. C. Stebbins, president; T. E. Thomas, vice-president; F. G. Clark, secretary, treasurer and general manager; W. H. Newbrough, G. W. Knapp, C. D. Woodbury and H. D. Luce, directors.

### Call for State Organization.

A call has been issued by Chairman H. W. Smith of the Automobile Club of Syracuse for a convention to organize a State association, to meet at the Yates Hotel, Syracuse, on Saturday, April 25, at 8 p. m.

## EXECUTIVE COMMITTEE CHOSEN

**New York Dealers' Association Getting Into Working Shape—The Fifteen Men in Charge.**

On Thursday of last week the organization of the New York Automobile Trade Association was perfected by the adoption of a constitution and by-laws and the election of an executive committee of fifteen, in whom the control of the club and the election of officers will be vested. The membership will be on an individual basis and not on that of firm memberships, but not more than one individual connected with any concern can be on the Executive Committee, and every member of the association will have the right of appearing before the Executive Committee. George B. Adams presided at the meeting and John F. Plummer, Jr., acted as secretary. The Executive Committee elected was as follows:

Percy Owen, of the Winton Motor Carriage Co.; John F. Plummer, Jr., of the Locomobile Co. of America; Carleton Mabley, of Smith & Mabley; F. C. Armstrong, of the Electric Vehicle Co.; E. B. Galleher, of the Mobile Co. of America; R. M. Owen, of the Olds Motor Works; F. D. Homan, of Homan & Schulz; Edward Hayes, of Barry & Hayes; E. T. Kimball, of the Central Automobile Co.; R. A. Greene, of John Wanamaker; J. Lineberger, of the Rainer Co.; George B. Adams, of the International Motor Car Co.; Frank Eveland, of the Spalding Bidwell Co.; and F. M. Lande, of the U. S. Long Distance Co.

A Membership Committee, consisting of Col. Pardee, E. B. Galleher and Percy Owen, was appointed, and the meeting adjourned to await the action of the Executive Committee, which is to call a meeting after electing officers.

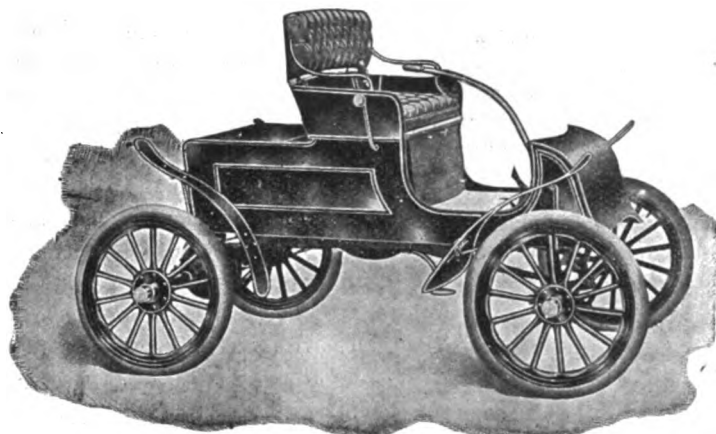
### The Liberty Short Circuited.

Last week a petition in bankruptcy was filed against Isaac H. Newman and Bernard Rosenberg, doing business as the Liberty Electrical Supply Company, at No. 136 Liberty Street, by the following named creditors: Emil B. Abbott, \$303; Bernard Gothberg, \$121, and William Roche, \$170. It was alleged that the concern is insolvent, and that in the past four months they have transferred a portion of their property to give a preference and paid certain creditors more than \$3,000. They began business in February, 1902, claiming a cash capital of \$1,500, and sold batteries and other electrical supplies.

### Kidder Plant Purchased.

The plant of the Kidder Motor Vehicle Co., New Haven, Conn., which the directors recently decided to wind up, has been purchased by John H. Springer, of that city. He will at once begin the manufacture of both steam and gasoline cars.

# THE NORTHERN



costs a little more and is a great deal better than any other runabout on the market.

Built for comfort and service and gives both.

## THE RUNABOUT FOR EVERYONE.

**NORTHERN MANUFACTURING COMPANY, Detroit, Mich.**

**AGENTS:** { HOMAN & SCHULZ, 100th St. and Broadway, also 38th St. and Broadway, N. Y. N. Y.; ALVAN T. FULLER, 243 Columbus Ave., Boston, Mass.; P. DES MARAIS & CO., Bristol, Conn.; BANKER BROTHERS COMPANY, Philadelphia, Pa.; R. V. CONNERAT, Savannah, Ga.; OHIO MOTOR CAR CO., 317 Huron St., Cleveland, Ohio; NATIONAL AUTOMOBILE & MANUFACTURERS CO., 26 Fremont St., San Francisco, Cal.; FRANK P. ILLSLEY, 284 Wabash Avenue, Chicago, Ill.; MOTOR CAR CO. of N. J. Newark, N. J.

## Success! Safety! Speed!

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MECHANICALLY FASTENED TO RIM.

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AIR CHAMBER ALL ABOVE RIM.

ANYONE CAN TAKE OFF AND PUT ON.

**Why use a type of tire originally intended for bicycles?**

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INTERESTING "TIRE TALK" ON REQUEST.

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**PHILADELPHIA,**

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**CHICAGO,**

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### What and How Bicyclists Fought.

It is not surprising that the New York Motor Cycle Club has decided to take the initiative in effecting a national organization of motocyclists. The manner in which the same burdensome impositions designed to apply on big, broad, heavy cars are being made to apply equally on the small, single track motor bicycle is an apt illustration of the intelligence and fairness prevailing in legislative halls. Between the empty promise of the impotent League of American Wheelmen to safeguard the interests of motocyclists and the disinterest of the automobilist, the motocyclist has no easy road to travel. Some of the laws require him to do practically impossible things. It is not these things, however, that are of present concern; it is the hope and possibly the shame that the projected organization holds for the automobilists themselves.

When, nearly twenty-five years ago, the League of American Wheelmen was formed,

there were scarcely 2,500 bicyclists in the country, but they were subjected to just such legislative persecution and were the victims of such a hue and cry as is now the lot of the automobilist. But once their organization was effected they did not countenance such licensing and tagging compromises as now are the automobile organizations' ideas of right. The first president of the L. A. W. in his inaugural address laid down this policy:

"We each have the right of every citizen of this country to the equal and impartial use of the public highways, and of the public parks and driveways, which our fathers dedicated, or for which our taxes help to pay; and we will not rest until we and our brother wheelmen have the freedom of travel on our wheels anywhere from Penobscot Bay to the Golden Gate."

And the policy was adhered to unfalteringly until "the equal and impartial use of the public highways . . . from Penobscot Bay to the Golden Gate" became an accomplished fact. Central Park, in this city, like many other parks in other cities, was closed to the wheelmen. But they did not weep, wall, threaten or compromise. They fought for their inherited right to the free use of the roads which their fathers dedicated, and they won. There was no trade association in existence at that time. Colonel Albert A. Pope was about all there was of the trade, and he did what the trade ought to do. He opened his purse to help make the inherited right secure.

The automobile industry has its association—one with a bulging treasury; the automobilists have two so-called national organizations, with weak treasuries, and a local organization with a national name and with a strong box. But there is not one of them with magnanimity or courage enough, or whatever it may be termed, to stand up and concede nothing short of "the right of every citizen of this country to the equal and impartial use of the public highways."

It is because of the understanding that the borning national organization of motocyclists means to stand or fall for that principle that its coming will be awaited with more than usual interest and its welcome be warm and hearty.

May it shame the automobilists into engaging in a man's fight for a man's right!

### Concerning the Commercial Test.

In enlarging the scope of the commercial vehicle test by adding to the number of classes the contest committee has undoubt-

edly acted wisely. The range of load carriage is a wide one, from 750 to 20,000 pounds, and brings into the contest practically every type of transportation vehicle extant, or likely to be made in the near future.

The value of the contest is thus greatly enhanced, and the promise of the committee that the performance of each vehicle will be published in detail is in direct line with the avowed policy of obtaining the greatest possible amount of publicity. Commercial houses will, therefore, be enabled to satisfy the desire for information concerning vehicles in actual operation which many of them are known to possess, and collect data and statistics upon which to base a decision when the question of the retention or dispensation of the horse comes up.

The provision that contesting vehicles may carry 300 pounds either in excess of or less than the stipulated dead weight of their class is also a well considered one.

If we take the case of a vehicle weighing, say, 2,000 pounds, it will be seen that it would, in the absence of this provision, be compelled to go into the second class and carry 1,500 pounds of dead weight, or the same as a vehicle weighing 3,000 pounds. But it may now add 300 pounds to the 750 required for the first class, and thus comply with the provision that it must carry a dead load equivalent to 50 per cent of its own weight. On the other hand, a vehicle weighing 7,200 pounds would have to go into the fourth class and carry 6,000 pounds were it not for this provision. By dropping 100 pounds it is still carrying half its own weight, and at the same time retaining its place in the third class.

It is provided that the awards shall be based on the running cost a ton mile and the amount of time consumed in making the runs. But no formula is given to show the relative importance of the two factors in making the calculation, nor is there any speed limit fixed. Presumably the legal limit of eight miles an hour will govern.

### Massachusetts Indecency.

Massachusetts may have been "the cradle of liberty," but the law affecting automobilists which is now pending in its legislature, and which is reprinted in another column, makes it appear that the bottom is now out of the cradle and Liberty is on the floor scratching out its eyes. To constitute the State Highway Commission a body with power to deny to certain citizens the right to use the public highways, or to revoke the

right at will, is about as far removed from republican liberty as the laws affecting Siberia. To require that one class of citizen shall not sell or otherwise dispose of his personal property without reporting and recording the transaction may be according to the American constitution, but we doubt it, while to single out a particular and respectable industry for special taxation and espionage is repugnant to decency if it also is not illegal. Such prospects make plain that in Massachusetts the manufacture, sale and use of automobiles is considered worse than pawn-brokerage or the sale of firearms or poison.

If the law is enacted the unconvicted thief or murderer will have more real liberty than the Massachusetts automobilist.

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### Unreason in Tire Demand.

Within a couple of years the demand for tires has undergone a remarkable change. Where formerly the single tube had the field almost to itself, we have seen the clincher type achieve sudden and wide popularity, until to-day it dominates the situation, and leaves to its rival only a tithe of the trade that it once possessed.

Already the season has advanced sufficiently to make it clear that users are demanding clincher tire in the great majority of cases. The belief that the so-called "craze" was largely talk is no longer a tenable one. Specifications of the cars on order call for the Clincher tire in the great majority of cases, the showing of the single tube being hardly more than entitled to the appellation of scattering. One tire concern states that the percentage of the demand for clincher tires reaches almost 90 per cent, and that it is quite unable to fill orders for them promptly.

There is a strong probability that the tide is setting too strongly in this direction to last very long. The temptation to overdo a matter of this kind is one very easily fallen into, and it may very well be that users who would be better suited with a single tube tire have fallen into line with the mass of other users and selected clinchers. But excesses of this kind usually correct themselves, and may be relied upon to do so without any great delay.

It is not easy to draw a broad line of distinction between the two types and their uses, yet the consensus of opinion is that the following is a sound general proposition: The users of light cars—runabouts and even light touring cars—are likely to suffer less

from punctures and other troubles when employing single tube tires than would fall to their lot if their cars had clinchers fitted to them. Conversely, the use of the latter on the heavier cars is attended with advantages. The repair of big, heavy single tube tires is not an easy matter, even with the best repair appliances of to-day; and it is just here that the clincher scores, while the thickness of its outer cover preserves it from many mishaps that the smaller sizes would meet with.

At the same time it will be found that there are motorists who will choose one or the other type of tire irrespective of its size or the weight of the car it is to carry. In doing so they will be actuated largely by their individual preferences, sometimes fortified by experience, at others swayed merely by the influence of others.

It is pretty nearly a foregone conclusion that the present season will shed a flood of light on the subject and enable an intelligent judgment to be formed. Upon it will depend whether or not the clincher type will retain its present overwhelming advantage.

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### Work for the Technical Committee.

One thing that the farcical tests to select cars for the International Cup Race team did demonstrate was the inadequacy of the arrangements for a satisfactory selection. Even though all the cars had gone well over the selected course and had made a good showing in a two hundred mile run at fourteen miles an hour, it would not have been known that they were perfectly fit candidates for the 369 mile race at high speed over the Irish roads.

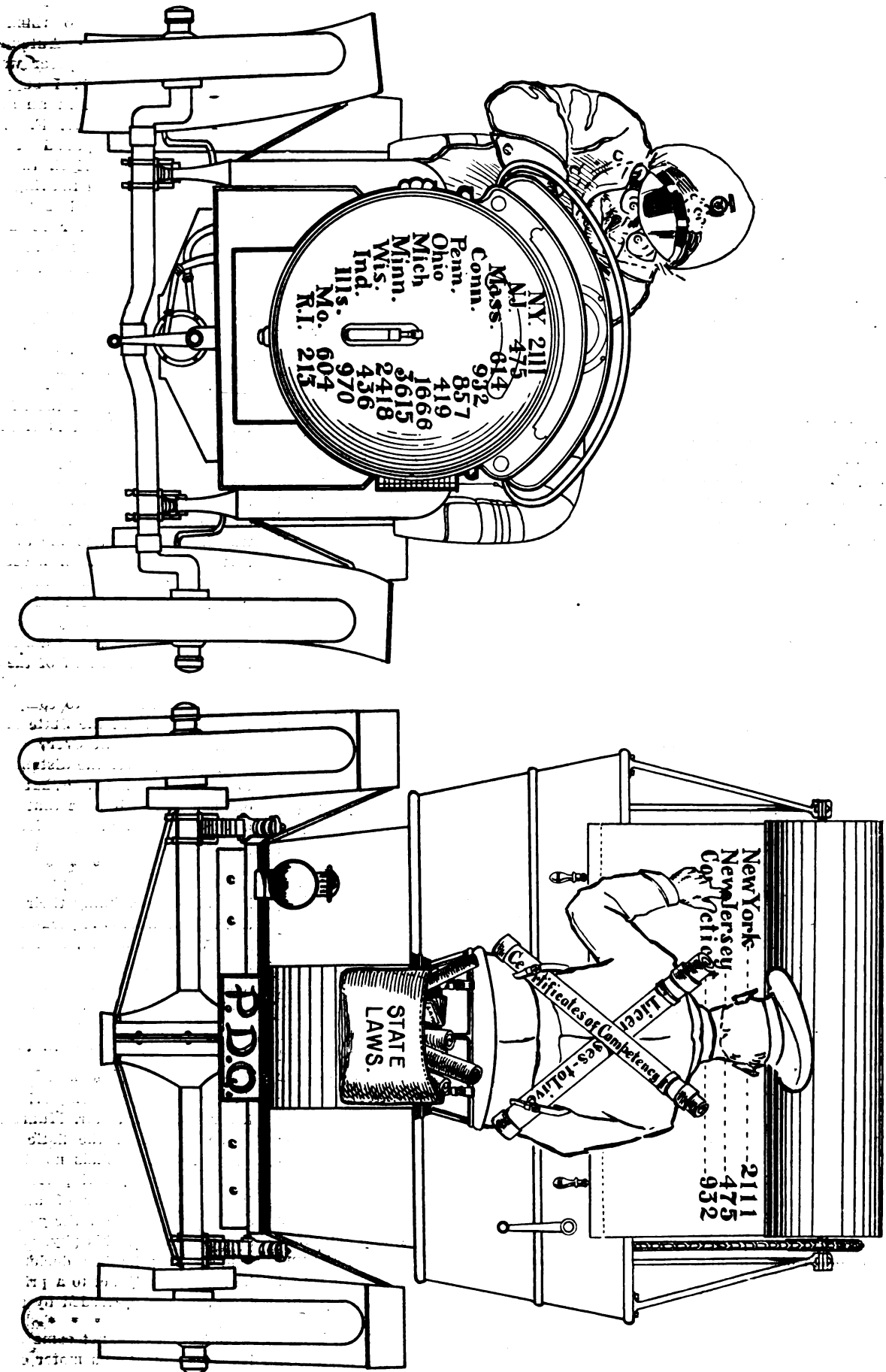
The construction of the cars should have been gone into and passed upon by experts. It was acknowledged by the members of it that the Race Committee having the say on selecting the cars was not qualified to pass on the technical details of construction. The services of a technical committee were needed to say whether or not there were any serious shortcomings in the make-up of the cars, such as might render them unworthy representatives of America in an international race.

It is known that one car built to make the team cannot be run slowly enough to be taken through city streets under its own power, and yet in the race there will be controls through towns were slow travelling is required. Another candidate appeared with an oil tank that would not hold one-

third enough lubricant to last the journey, and there were some severe criticisms made on the Long Island course concerning vital features of construction. Whether the criticisms were just or not, it would seem to be obvious that a committee competent to make criticisms on mechanical details should have had a part in the selections, with power to bar out machines having defects sufficiently serious to interfere with the chances of finishing the race. It is a sorry fact to record that only one car in two days of trial made a round trip over the six mile course without being obliged to stop. It is true, too, that the only car which attempted to travel the twenty miles between the city and the course by starting on the day of the tests could not get there in time. Those who were there promptly started the day before each time. The reputation of the manufacturers who built the cup candidates leaves no room for doubt as to their ability to produce satisfactory cars, and unquestionably the cars that go to Ireland will be good enough to have a fair chance in the race, but in the effort to produce something much superior and having new features there is a possibility of the most sound and conservative designers making mistakes in machines. For this reason it would have been much more gratifying to have had an elimination examination by those competent to pass on the mechanical details.

Now it is not generally known, but the American Automobile Association has a Technical Committee, made up of men of recognized ability in mechanical understanding and of undoubted integrity. This committee is little known because it has been languishing for something to do. It could have found a worthy field for its abilities in connection with the selection of the cup race cars had the Automobile Club seen fit to invite it to act in its behalf in this manner and given it power. Men of technical judgment have not figured enough in the automobile contests. Good sportsmen and intelligent men are hardly enough for contest committees. It seems as if there should be some committee with the ability to detect faultily constructed vehicles, with the power to bar them from competitions in which they might prove dangerous. This does not refer to any case in point. It is pointed out not because of the existence of any dangerous "freaks" in the past or present, but in recognition of the fact that their appearance on the scene is always a possibility which should be provided for.

SUGGESTED BY RECENT "AUTOMOBILE LEGISLATION."



The size and appearance of the lamp of the future if the number-on-lamps requirements continue to multiply.

The rear of the vehicle having become insufficient for the display of license numbers, The Motor World presents these unpatented contrivances designed to obey the laws of all states.



# Commentary

New Jersey has found time between the passing of prohibitory automobile laws and other equitable measures of a like sort to indulge in a spring housecleaning. The result of this has been that the junk dealers will be benefited by being enabled to purchase very cheaply a quantity of first class bond paper upon which appears some excellent examples in various colored inks of the printer's art. Nearly one thousand corporations have had their rights taken away from them by the State of New Jersey because the companies have for two years neglected to pay the State the small amount she demands for the rights she grants them. Among this thousand dead ones thirty-seven automobile corporations are numbered. I don't suppose it will be necessary to add that each and every one of this two score, lacking three, of defunct automobile concerns was a still-born infant; in fact, it had never lived outside of the imagination of its promoters, the regrets of its backers and the records of the State of New Jersey. Heading the list of the dear departed I find the National Light and Power Co., whose \$15,000,000 in capital was to be used in putting upon the market an electric battery which was to so far have out-Edisoned Edison's that the whole question of living would have resolved itself in the mere pressing of a button bearing upon it the monogram N. L. P. C. But, alas, it could not be! With the passing of the fifteen million dollar promise of push-the-button propulsion we are once more brought face to face with the fact that Edison has now an undisputed monopoly in the sweet bye and bye brand of swiftness, and we might just as well resign ourselves. But it's tough, blamed if it ain't!

The automobile owner who, under the combined misfortunes of a breakdown and the unsolicited advice which the quickly gathered Sunday crowd generously gives him, can remain good natured is sure of a great reward in the next world. Heaven would be incomplete without him.

Dear me! how young it makes me feel to find in my mail last week one of those bills of fare wherein the jokesmith has been allowed to saw out great jagged chunks of alleged humor and to inflict the aforesaid sawings upon a defenceless lot of dinner eaters! How it all comes back to me! In the good old bicycle days of twenty or more years ago, we never thought of having any sort of a formal feed without this witty—that's what we called it—bill of fare, and now, when I see "friction clutch salmon" billed to be chased down the diner's throat by "twenty-four horsepower pommes," with

a few "wheel steering tomatoes" on the side, time rolls backward and I am once more young again. Such originality and pretty wit one scarce expects in these prosaic days of automobiles; but then it is the unexpected which always happens, even in menus, and so I suppose I had no right to expect more wisdom in the present generation than its predecessor possessed. Like the poor, the menu humorist we have always with us, and we cannot hope to escape from either.

I have been surprised to observe that automobilists seem to think it ill becomes so great a commonwealth as that of the State of Pennsylvania for it to seek to enact a law aimed at automobiles which, should it pass, would virtually bar the motor vehicle out of Quaysylvania. Within a month a man has been arrested in Philadelphia for the unlawful act of kissing his wife on Sunday, and the law under which this arrest was legally made goes even further, and specifically states that "no mother shall kiss her child on the Sabbath or any day of fasting." Now, in a community having such laws and actually enforcing them in the year 1903, what right has any one to expect that anything so modern as the automobile would be treated with any different legislation than that which is proposed for it? Well, I wot not!

There is more to be learned about an automobile by listening than there is by talking. This explains why many owners learn so little about the vehicles they pay so well for.

The unfortunate automobilist who has found his holiday on Long Island roads cut short by a combination of arrest, a fine and a general shakedown all around has in his anger been often tempted to remark "Well, this is ——" All wrong! It is Paradise, only the automobilist didn't know it, that's all. The Farmer's Club met at the American Institute last week and officially promulgated this paradise rating of Long Island. That settles it. If, however, there are still some doubters, then let them listen to what Mr. H. B. Fullerton said at this Farmer's Club meeting which declared Long Island to be a paradise: "No one ever dies on Long Island," enthusiastically testified Mr. Fullerton, who, had he been questioned, might have offered himself as a living example of his eternal life statement, for had not Mr. Fullerton himself been one of an automobile party of six which a Long Island Railroad engine had scattered over a six-acre lot, and did not he and the other scattered ones get out of the hospital some months later with their lives? Sure thing! Now get you gone, hie thee to Long Island, and there gladly pay whatever its clam-digging, punkin' dusting "jedges" and p'leecemen may charge you, for have you not the word of the Farmers' Club and the living testimony of Mr. Fullerton that while

you are on Long Island you are in Paradise and cannot die!

Some of those who think it obligatory always to laud the Automobile Club of America often have queer ways of bestowing what they think, I suppose, is praise. For example, I read in an afternoon paper on Saturday that "Mr. F. F. Siton, of the A. C. A., is quite proud of his success in converting Pirk McHell, the playwright, to automobiling, and in making such an enthusiast of him that he has consented to have his name proposed for membership in the club." Imagine what sort of an organization the ordinary reader must think the A. C. A. is when a member of it is "quite proud" solely because he has induced the manager of a cheap comic opera company to consent—mind you, consent—to have his name proposed for membership?

Competition may be the life of trade, but I have noticed that it is often death to the trader.

When it comes to travelling over a road it is a moot question whether it is more difficult to determine where to travel or how to travel. Of course, to me the first question is the only one which needs to be taken seriously, since as a man possessed of ordinary intelligence, I naturally believe that the automobile has very effectually disposed of the how part of the difficulty. Now, to dispose of the first half of the dilemma comes Assemblyman McCullough with a bill at Albany which seeks to compel all Highway Commissioners in the State of New York to erect sign posts at every crossroad telling the poor wayfarer the distance and the route to the nearest hotel. What more could any one ask, unless it were that the name of the nearest repairer and gasoline depot be also printed upon Mr. McCullough's boards?

While some of those professionals who are loudest in proclaiming their wonderful abilities as chauffeurs are jacks of all trades and good at none, others, and I might say the majority, of them, are jacks of no trade and good at nothing—except bragadocio. All this with due respect to the gentlemen who don a leather coat and accept a hundred dollars or more a month to run some one else's automobile.

Automobiles are conquering new fields of favor every day. Mr. Munroe, who aspires to be a king of the fistic arena, has announced that he finds nothing so conducive to attaining physical perfection and condition as a daily use of an automobile. I don't know just how the gentleman employs an automobile in his physical culture, but it suffices that he has declared the trotting horse as an adjunct to a prizefighter's training outfit as superseded by the motor.

Perfection does not come all of a sudden; it grows slowly on a motor or a vehicle, like the shell on a crab.

THE COMMENTATOR.

## The Metropolitan Salesrooms and Garages—VII

One of the earliest established sales and storage stations in New York City, and one of those most widely known, is the branch of the Winton Motor Carriage Co., at No. 150 East Fifty-eighth-st., near Third avenue.

Housed in what was formerly a part of a playhouse, the palm garden of Proctor's Theatre, this establishment presents a striking appearance, both outside and within. It has a frontage of 100 feet on Fifty-eighth

ward over the spacious ground floor after the fashion of figureheads on the bowsprits of merchant craft.

The working space of the place is found on the ground floor and in the basement, be-



This is the general headquarters for Wintons in this vicinity, and, barring factory sales, it is claimed for it that "more dollars' worth of automobiles are handled in this place than any other in the country." As it is the distributing station for all the greater New York district, this claim is quite reasonable.

street, and its depth is 80 feet. It is built of steel and fireproof brick, with a vaulted skylight overhead. A balcony runs around three sides of the building, inside and from the bases of the roof girders there loom heroic bust carvings of the gods and goddesses of Grecian mythology, which lean for-

tween which there is communication by an elevator. The offices are in the balcony on the front side of the building, from where Percy Owen, the popular presiding genius of the place, can see all that is doing on the floor by glancing through the window of his private office. In the balcony also are found

the stockroom, lavatory and waiting room for customers.

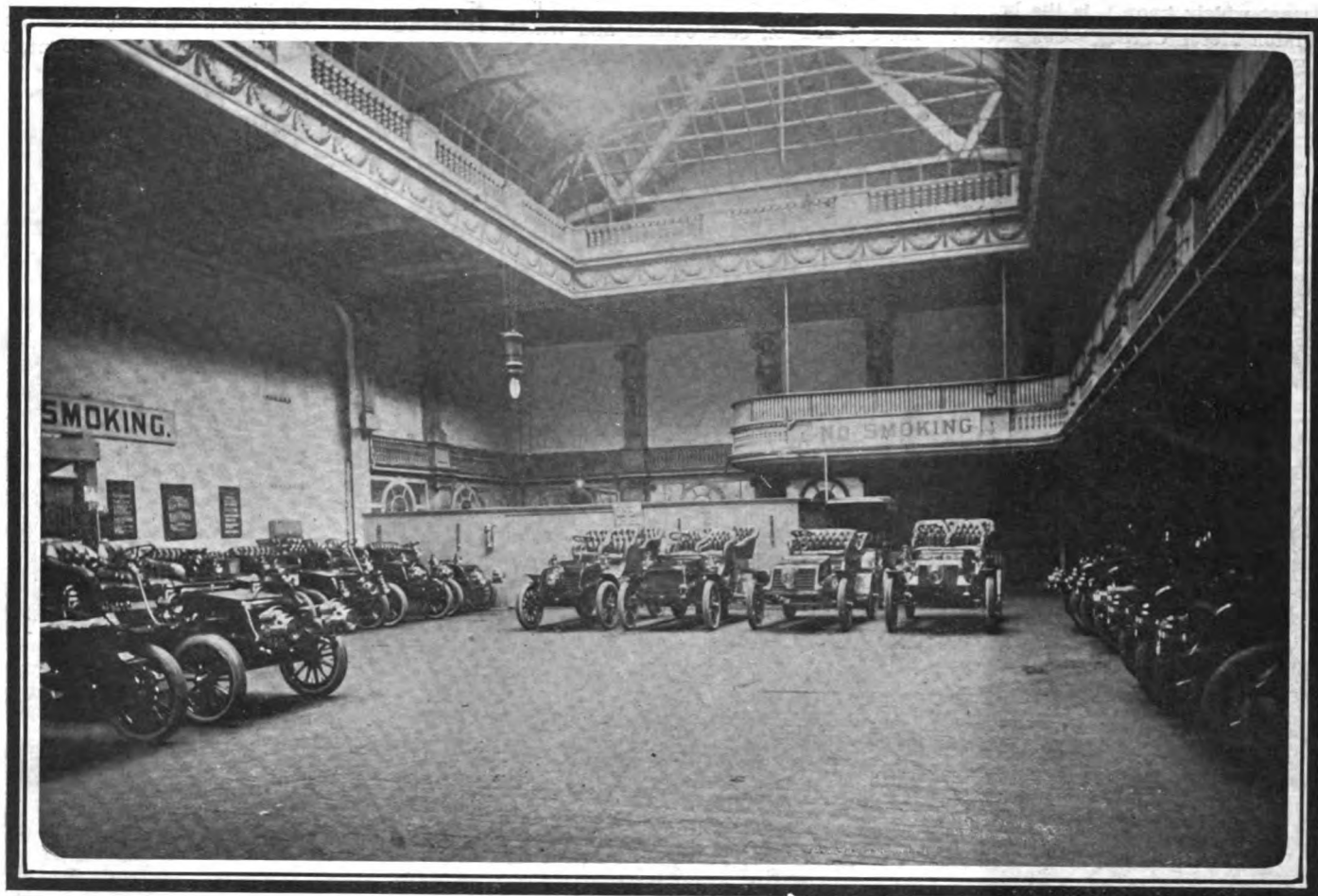
On the ground floor and in the basement, both of which have cement floors, wood covered, there is room for storing eighty vehicles. A thoroughly equipped repair shop, 30x40 feet in dimensions, is found at the

front door. Asbestos enters largely into the interior construction, and the building is as nearly fireproof as they make any. There is electric lighting and steam heat throughout.

This is a branch station of the 'Winton company, and has been so since it was

to take them to strange repair shops.

The fact that the place is always well filled and that from twelve to eighteen men are kept busy all the time sufficiently attests that this station has enough to do looking after Winton customers without taking outside work.



INTERIOR OF THE WINTON SALESROOM.

rear of the main floor. This workroom is provided with two pits to accommodate the mechanics working on the cars. There are no posts on the main floor, and a magnificent sweep is afforded for backing a car into its place or getting it out. The storage vault for gasoline is built out under the sidewalk, and is pumped to the main floor near the

opened in December, 1900. No cars except Wintons are either stored or repaired, and it cannot therefore be classed, strictly speaking, as a public garage. The idea of it was to provide a place where Winton patrons might take their cars and be confident of their being in the hands of men who thoroughly understand them, instead of having

Owing to a new disposition of the property by the owners, however, the Winton branch must move before December 1 of this year, and a much larger place is being sought, where probably the possession of more room than any other place in the city may lead to the taking in of other business than that on Winton cars.

#### Federal's New Mill.

Three months or so ago, when the Federal Manufacturing Company's sheet steel mill at South Chicago, Ill., was destroyed by fire, there was little expectation that the new mill then in process of erection at Elyria, Ohio, would be completed in time to be of much service for this season. But by extraordinary effort in pushing the work of building and installation to completion the new mill is in operation to-day.

The new mill covers five acres of ground and is considered by its owners a model plant. Although at present the mill is only equipped for rolling cold steel, it is the intention to erect a building for rolling hot

steel. The hot rolling building will be 300x80 feet. All sizes of steel from 2 inches wide up to 16 inches, and in gauge from 16 inches to  $\frac{3}{4}$  inch, will be handled. The pickle house dimensions are 50x75 feet. Electric hoists and travelling devices convey the stock from this house to all points in the mill where it is rolled. The cold rolling department has a capacity of 75 tons a day. This building measures 20x80 feet. Stock up to 16 inches wide and in gauge from .010 to .250 is rolled, cut, straightened, slit and sheared. The cold drawing and wire flattening department is located in a building 140x80 feet. The annealing department is 60x80 feet wide and contains six Swindell furnaces, fired by pat-

ent gas producers. The shipping room is 60x80 feet. All steel leaves this room in bright condition. The boiler room, 75x60 feet, is equipped with six tubular boilers, each of 150 H. P. The stokers are automatic. The gas producing house, measuring 30x60 feet, is equipped with three machines for supplying gas to the annealing furnaces. The rotary shear in the shearing room takes stock  $\frac{1}{4}$  inch thick and 26 inches wide in any number of strips.

In all respects this mill is among the most modern in the country. Its equipment has been the special study of Mr. David B. Marwick, manager of the plant, who has now a lifetime's experience in steel making and steel working, and who has held important positions with several of the largest concerns in the country.

## STEAM SCORES UP-HILL

**Wins Event for Winnings Cars and Makes Best Time—Some Surprises in Gasolene Classes.**

Boston opened the 1908 season on Monday with a formal hill climbing speed contest under the auspices of the Massachusetts Automobile Club. Although almost entirely a local function, it was decidedly interesting and enjoyable, and productive of a number of surprises.

A steam car—a Stanley—carried off the honors, making by far the best time of the day and winning both in its class and in the free for all race. Next came a Warwick motor bicycle, a good second in the latter race, and a considerable distance in front of all the other gasolene vehicles. Then came three Indians, all making faster time than any of the gasolene cars. Steam scored also outside the free for all race. The slowest of the five competing steamers made considerably better time than any of the gasolene cars.

Of the latter the heavy and the light classes proved to be remarkably closely matched; the latter having a slight advantage in point of time. A Stevens-Duryea, in the under 2,000-lbs. class, climbed the hill in 43 1-5 seconds, or just 1-5 second faster than a Peerless in the over 2,000-lbs class. In the free for all race the two met again and exactly duplicated their performances.

The electrics showed up finely also. A Waverley made a record of 1.16 3-5, better time than a number of the gasolene cars.

The contest took place on Commonwealth Avenue, between Brookline and Allston, on a hill neither long nor steep. The road was a broad, winding, fairly smooth macadam, one-fifth of a mile in length and with a maximum grade of 15 per cent. Taking place on Monday, celebrated as Patriots' Day, the event attracted 5,000 people and about 400 vehicles. The arrangements were well made and carried through without a hitch. The Chronograph Club was in charge of the timing, and the system used by it worked to perfection.

The result of the contests and the time of each car and its horse power follow:

## STEAM VEHICLES.

Operator and Make.	Horse power.	Time.
F. Durbin, Stanley.....	5½	17
J. H. McAlman, Locomobile....	5½	22 1-5
C. B. Grout, Grout.....	5½	25
H. E. Jay, White.....	10	31 3-5
C. I. Campbell, Mobile.....	6	33 2-5
GASOLENE, UNDER 2,000 POUNDS.		
F. E. Randall, Stevens-Duryea. 5		43 1-5
A. T. Harris, Duryea.....	8	45
J. R. Snow, Peerless.....	16	46
L. R. Ross, Packard.....	10	51 1-2
C. H. Robinson, Peerless.....	16	53 3-5
J. H. Ordway, Crest.....	5½	1 15 4-5
O. B. Cole, Duryea.....	8	1 40 3-5
L. J. Phelps, Darracq.....	8	1 08 2-5
H. H. Brown, Darracq.....	16	1 34
Gerard Bement, Peerless.....	16	1 20 3-5
G. G. Reed, Knox.....	8	1 04 1-5

A. R. Peabody, Oldsmobile....	6	1 28
Wm. Jameson, Orient Buckboard 4		1 24 2-5
A. Adams, Cadillac.....	6½	1 19 2-5

## GASOLENE, OVER 2,000 POUNDS.

J. R. Snow, Peerless.....	16	43 2-5
C. H. Robinson, Peerless.....	16	51 2-5
Harry Fosdick, Winton.....	20	56 3-5
F. E. Townsend, Winton.....	20	1 06 3-5
John Williams, Winton.....	16	1 39
J. T. Robinson, Jr., Pope-Robinson.....	16	1 33 2-5
J. T. Robinson, Pope-Robinson..	16	1 37 2-5

## GASOLENE WITH TONNEAU.

J. R. Snow, Peerless.....	16	51 4-5
Gerard Bement, Peerless.....	16	51 4-5
L. R. Spear, Winton.....	16	1 07 2-5
C. H. Robinson, Winton.....	16	1 07 2-5
F. E. Townsend, Winton.....	16	1 12 3-5
Leon Morrill, Winton.....	16	1 24 2-5
Harry Fosdick, Winton.....	20	1 28 3-5
A. Adams, Toledo.....	12	1 36 3-5
J. Williams, Winton.....	16	1 39 3-5
W. E. Eldridge, Toledo.....	12	1 56 1-5

## ELECTRICS.

W. G. Titcomb, Waverley.....	3	1 16 3-5
W. E. Eldridge, Waverley.....	3	1 40 2-5
A. F. Neal, Waverley.....	6	2 25 2-5
A. F. Neal, Waverley.....	6	2 35 3-5

## MOTOR BICYCLES.

Joe Downey, Warwick.....	1¾	28
Oscar Hedstrom, Indian.....	1¾	28 1-5
H. E. Rogers, Indian.....	1¾	30 3-5
George Temple, Indian.....	1¾	30 1-5

## FREE FOR ALL.

F. Durbin, Stanley.....	5½	16 3-5
Joe Downey, Warwick motor bicycle.....	1¾	28
F. E. Randall, Stevens-Duryea. 5		43 1-5
J. R. Snow, Peerless.....	16	43 2-5
J. R. Snow, Peerless.....	16	51 4-5
W. C. Titcomb, Waverley.....	3	1 16 3-5

The officials were: Referee, Col. James T. Soutter; Judges, R. R. Sheldon, J. H. MacAlman, A. P. Underhill, George B. McQuesten, Dr. Shrigley and W. A. Woodworth.

## Mueller and Fisher to Meet Again.

Confident that he can turn the tables on his successful opponent, Conrad Mueller, of Indianapolis, Ind., last week challenged Carl G. Fisher to a series of five races, to be run by one machine, each for a side bet of \$200. Mueller wanted the races to take place at once, but Fisher has not a machine of his own in stock, and for this reason he had to ask that the first race of the series be postponed.

Fisher will accept Mueller's challenge within two weeks, but he would prefer to have one or more of the proposed tests run off at the proposed meet at the Fair Grounds, May 30.

It will be recalled that the two men raced to Columbus and return a few weeks ago, Fisher driving an Oldsmobile and Mueller a Cadillac. The former was victorious, and since then Mueller has been longing for a return race.

## Bostwick is Back.

On Saturday last the steam yacht Sultana, belonging to A. C. Bostwick, the well known motorist, and with its owner aboard, docked at Bay Ridge, from Jacksonville, Fla. Mr. Bostwick has been cruising in Southern waters for more than two months.

## WORSE THAN CRIMINALS

**Bay State Bill Makes Motorists so Appear—Makers, Dealers and Users are all Affected.**

Because it provides for speeds of twenty and twelve miles per hour the bill recently favorably reported by the Committee of Roads and Bridges of the Massachusetts Legislature—House bill No. 1,325—has been heralded in some parts of the country as "rational legislation." Examination of the bill, however, proves it to be nothing of the sort. It is, instead, one of the most autocratic and mischievous measures yet proposed.

It invests the State Highway Commission with the practically czarlike power to at its pleasure deny or revoke the right to the use of any or all of the common roads; it requires also that in the event of a car being sold by an individual owner the sale of this, his personal property, shall be promptly reported and recorded; it provides not only for registration certificates, but for licenses and for the display of numbers not only on the rear of cars, but on both sides of them. Not satisfied with mulcting and restricting the users, both the manufacturers of and dealers in automobiles are levied on. The proposed law would compel them to pay a special license fee of \$10 for the privilege of doing business and for a special tag advertising the fact. The speed limits, while generous, are nullified by the power granted local authorities to impose such limitations and other restrictions as they may deem wise or expedient. With the sanction of the Highway Commission any city, town or village is free to prohibit the use of any road or roads.

The sanest provision in the bill is the clause exempting non-residents who are registered in other States, but again this sanity is reduced to a minimum by the provision that these non-residents shall be subject to such rules as the Highway Commission may make.

The full text of this remarkable measure is as follows:

Section 1. All automobiles and motor cycles shall be registered by the owner or person in control thereof in accordance with the provisions of this act. Application for such registration may be made, by mail or otherwise, to the Massachusetts Highway Commission or any agent thereof appointed for this purpose, upon blanks prepared under its authority. The application shall, in addition to such other particulars as may be required by said commission, contain a statement of the name, place of residence and address of the applicant, with a brief description of the character of the automobile or motor cycle, including the name of the maker, the number, if any, affixed by the maker, the character of the motor power, and the amount of such motor power stated in figures of horse power; and with such application shall be deposited a registration fee of five dollars, except that the fee for motor cycles shall be two dollars. The said commission or its duly authorized agent shall then register the automobile or motor

cycle described in the application in a book to be kept for the purpose, giving to said automobile or motor cycle a distinguishing number or other mark, and shall thereupon issue to the applicant a certificate of registration. Said certificates shall contain the name, place of residence and address of the applicant, the registered number or mark, shall prescribe the manner in which said registered number or mark shall be inscribed or displayed upon the automobile or motor cycle, and shall otherwise be in such form and contain such further provisions as the commission may determine. A proper record of all applications and of all certificates issued shall be kept by the commission at its main office, and shall be open to the inspection of any person during reasonable business hours. Said certificate of registration shall always be carried in some easily accessible place in the automobile or motor cycle described therein.

Upon the sale of any automobile or motor cycle, its registration shall expire, and the vendor shall immediately return the certificate of registration to the Highway Commission, with notice of the sale, and of the name, place of residence and address of the vendee.

Every manufacturer of or dealer in automobiles or motor cycles may, instead of registering each automobile or motor cycle controlled by him, make application upon a blank provided by said commission for a general distinguishing number or mark, and said commission may, if satisfied of the facts stated in said application, grant said application, and issue to the applicant a certificate of registration containing the name, place of residence and address of the applicant, the general distinguishing number or mark assigned to him, and otherwise in such form and containing such further provisions as said commission may determine; and all automobiles and motor cycles owned or controlled by such manufacturer or dealer shall, until sold or let for hire or loaned for a period of more than five successive days, be regarded as registered under such general distinguishing number or mark. The fee for each license shall be ten dollars.

No automobile or motor cycle shall, after the first day of August, in the year nineteen hundred and three, be operated upon any public highway or private way laid out under authority of statute, unless registered as above provided, and the registered number or mark of every automobile and motor cycle operated as aforesaid shall at all times be inscribed or displayed upon both sides and the back thereof in Roman characters not less than four inches long, and conforming in this and other details to the requirements prescribed by the Highway Commission in its certificate of registration.

Section 3. Licenses for operating automobiles and motor cycles shall be issued by the Massachusetts Highway Commission or duly authorized agents thereof. Application shall be made upon blanks prepared by the commission for this purpose, and the licenses issued shall be in such form and shall contain such provisions as to said commission seem desirable. Each licensee shall be assigned some distinguishing number or mark, and a proper record of all applications for license and of all licenses issued shall be kept by the commission at its main office, and shall be open to the inspection of any person during reasonable business hours. Each license shall state the name, place of residence and address of the licensee and the distinguishing number or mark assigned to him.

Special licenses for operating automobiles or motor cycles for hire shall be issued by the commission, but no such license shall be issued until the commission or its agent duly authorized shall have satisfied itself or him-

self that the applicant is a proper person to be granted such license. Such licenses shall be granted for one year only.

The fee for each license to operate for hire shall be three dollars; the fee for other licenses shall be two dollars. All fees shall be deposited at the time of making the application.

Automobiles and motor cycles registered in other States and driven by persons licensed in other States may be operated on the roads and ways of this State, subject, however, to such rules as the Highway Commission may make.

The commission may at any time suspend or revoke any license for any misconduct of the licensee.

Section 4. No person shall, on or after the first day of August, in the year nineteen hundred and three, operate an automobile or motor cycle upon any public highway or private way laid out under authority of statute, unless licensed so to do under the provisions of this act. No person shall operate an automobile or motor cycle for hire, unless specially licensed by the commission so to do. No person shall employ for hire as chauffeur or operator of an automobile or motor cycle any person not specially licensed as aforesaid, and every chauffeur or operator for hire shall, while so acting, display the distinguishing number or mark assigned to him, in such manner as may be prescribed by the commission.

Section 5. Every person having control or charge of an automobile or motor cycle shall, whenever upon any public street or way and approaching any vehicle drawn by a horse or horses, or any horse upon which any person is riding, operate, manage and control such automobile or motor cycle in such manner as to exercise every reasonable precaution to prevent the frightening of any such horse or horses, and to insure the safety and protection of any person riding or driving the same. And if such horse or horses appear frightened, the person in control of such automobile or motor cycle shall reduce its speed, and if requested by signal or otherwise by the driver or such horse or horses, shall not proceed further toward such animal unless such movement be necessary to avoid accident or injury, or until such animal appears to be under the control of its rider or driver.

No automobile or motor cycle shall be run on any public way or private way laid out under the authority of statute outside the limits of a city or the thickly settled or business portion of a town or fire district at a speed exceeding twenty miles an hour, or within a city or the thickly settled or business portion of a town or fire district at a speed exceeding twelve miles an hour. Upon approaching a crossing of intersecting ways, also traversing a crossing or intersection, and in going around a corner, every person operating an automobile or motor cycle shall run it at a rate of speed less than that hereinafter specified and at no time greater than is reasonable and proper, having regard to traffic and the use of the way and the safety of the public.

Section 6. The commission may suspend or revoke the certificate issued to an automobile or motor cycle under section one of this act, or the license issued to any person under section three of this act, for any cause which it may deem sufficient; and any person convicted of violating any of the provisions of this act shall be punished for each offense by a fine not exceeding two hundred dollars. Any person convicted of operating or causing or permitting any other person to operate an automobile or motor cycle after a revocation or suspension of the certificate or license granted under this act for such vehicle shall be punished by a fine not

exceeding two hundred dollars, or by imprisonment for a term of ten days, or by both fine and imprisonment.

Section 7. Every automobile or motor cycle operated in this Commonwealth shall be provided with adequate brakes and with a suitable bell, horn or other means of signalling, and shall, during the period from one hour after sunset to one hour before sunrise, carry lights as prescribed by the Highway Commission.

Section 8. The fees received under the provisions of this act shall be paid over monthly by the secretary of the Highway Commission into the treasury of the Commonwealth, and be set aside as a fund to be known as the automobile fund, and so much of said fund as may be necessary to meet the expenses of this act shall be paid out of the same. Any balance remaining may be used by the State Highway Commission for repairs on State highways.

Section 9. The term "automobile" as used in this act shall include all vehicles propelled by other power than muscular power, excepting railroad and railway cars and motor vehicles running only upon rails or tracks. Nothing herein contained shall be so construed as to affect the rights of boards of park commissioners as authorized by law, or the Board of Aldermen of cities, or the Selectmen of towns, to make special regulations as to the speed of, or the use of, particular roads or ways by automobiles and motor cycles; including the right to exclude them altogether therefrom, subject to the approval of the Highway Commission; but no such special regulation shall be effective unless notice of the same is posted conspicuously at the points where any road affected thereby joins other roads.

Section 10. Chapter three hundred and fifteen of the acts of the year nineteen hundred and two is hereby repealed.

Section 11. Except as otherwise provided herein, this act shall take effect upon its passage.

### To Avoid Tunnels and Tracks.

Before the Rapid Transit Commission, at its meeting held on Thursday, John Brisben Walker, president of the Mobile Rapid Transit Company, presented a plan to carry passengers in automobiles for fares ranging from 3 cents to 10 cents, according to the distance.

"I think that the tunnel system is about as modern as the flintlock musket, and that the time is coming when the system of transporting passengers in automobiles will be adopted in all of the large cities of the world," he said.

He added that he simply wanted to call the attention of the commissioners to this new method in order that they may study it carefully before tying up hundreds of millions of the city's money in tunnel extensions. Mr. Walker gave figures to show that the automobiles would be capable of carrying all but about one hundred thousand of the traveling public, and stated that the cost of operation and maintenance would be so small that the company on a investment of \$10 could make a profit of 114 per cent and could afford to pay the city a handsome sum.

The board took the matter under consideration.

There are more than 500 registered automobiles in Cleveland, Ohio.



## READY TO RECEIVE ENTRIES

### Lists Opened for Commercial Vehicle Test— The Rules as Finally Promulgated:

With the issuance this week of the rules covering the Commercial Vehicle Test of the Automobile Club of America, May 20 and 21, the entry list has been formally opened. The fee is \$25, and the Contest Committee states that it has sufficient assurances of support to assure the complete success of the event.

As already stated in these columns, the classes have been changed and enlarged. They now number six, requiring the carriage of dead weight ranging from 750 to 20,000 pounds. Stops for taking on supplies will be charged against the vehicles, electrics being allowed one stop for recharging, and steam and gasoline not being limited.

The route for the two days' runs is, as was intimated, from the club house, No. 758 Fifth Avenue, to Washington Bridge and return, and to the Battery and return, the latter journey being made twice each day. This will impose a severe test, especially on the heavier vehicles, as there are many hills to be climbed in the northern part of the city, some of them very steep.

An observer is to accompany each vehicle, and other passengers may be carried if desired, but they are not to be included in the dead load.

Gold, silver and bronze medals are to be awarded in each class, the awards to be based on the cost of operation in ton-miles and the time occupied in making the runs.

The rules are as follows:

It will be assumed that every contestant is acquainted with the rules of the contest, and by entering therein he agrees to abide by said rules. In the event of dispute concerning the interpretation of the rules, the decision of the Contest Committee shall be final. The committee reserves the right to alter or amend these rules from time to time as they may deem expedient.

The contest will be open to types of self-propelled vehicles used for commercial purposes made in the United States or abroad.

Entry blanks will be forwarded by the club secretary upon request and must be filled out in full.

The time for receiving entries will expire on May 10, 1908. All entries must be accompanied by the following information in full. Weight of vehicle, including fuel, supplies and equipment; maximum dead load that vehicle can carry; capacity, water, gasoline, kerosene, fuel oil, coal and coke; name of manufacturer; place of manufacture; tires, make and size; motive power; rated horsepower of motor and number of cylinders; selling price of the vehicle. Electric vehicles—Weight of battery, number of cells, ampere hour capacity.

The entrance fee for all classes will be \$25.00 for each vehicle and must be forwarded to the club secretary with the entry.

Every person making an entry agrees that in the event of the vehicle being disqualified

or failing to take part in the contest the entry fee shall be retained by the club.

No entry will be received unless accompanied by the entrance fee.

A full description and photograph of the vehicle must accompany the entry.

All vehicles, whether electric, steam or gasoline, shall operate in the same class, which classification shall be on the basis of dead load carried.

There shall be divisions for electric, steam and gasoline vehicles. All vehicles shall be subdivided into five classes, as follows:

First Class—To carry a dead load of 750 pounds, to make 100 stops.

Second Class—To carry a dead load of 1,500 pounds, to make 100 stops.

Third Class—To carry a dead load of 3,500 pounds, to make 50 stops.

Fourth Class—To carry a dead load of 6,000 pounds, to make 25 stops.

Fifth Class—To carry a dead load of 10,000 pounds, to make 1 stop.

Sixth Class—To carry a dead load of 20,000 pounds, to make 5 stops.

Each vehicle must carry a dead load of at least 50 per cent of its own weight with all supplies on board, in addition to the driver and observer.

A vehicle may carry 300 pounds in excess or 300 pounds less than the specified dead load for any class, provided the dead load carried, exclusive of the driver and observer, shall be at least 50 per cent of the weight of the vehicle.

Electric Vehicles—Electric vehicles shall be allowed one stop for recharging batteries, the time of such stop and the amount of current taken to be recorded against the vehicle. Ampere-meter and volt-meter readings will be taken each day before and after the run, and before and after all intermediate rechargings.

Steam Vehicles—Time taken by steam and gasoline vehicles for replenishing water and gasoline supply will be charged against the vehicle.

Each contestant shall furnish his own dead load, consisting of whatever material he may see fit to carry, which will be weighed and checked by the Contest Committee and shall not be changed during the continuance of the contest.

Arrangements for taking water will also be made by the committee at the starting station and at intermediate points on the route, ten miles apart.

The contest shall cover two days—Wednesday, May 20, and Thursday, May 21.

The distances to be covered shall be as follows: First, second and third classes, forty miles each day, as follows:

First stage—From clubhouse to Fort George, Washington Bridge, Jerome Avenue, Seventh Avenue, to clubhouse ..... 20 miles

Second stage—From clubhouse to the Battery and return ..... 10 miles

Third stage—From clubhouse to the Battery and return ..... 10 miles

Total ..... 40 miles

For the fourth, fifth and sixth classes the third stage is omitted.

A compulsory stop of ten minutes will be made at the end of each stage.

Each vehicle shall carry an official observer, to be furnished by the club, to note the performance of the vehicle, fuel and water consumption, etc., and no repairs will be permitted without his knowledge and record of the same.

Each vehicle will be allowed to carry a sign of such size and character as its maker may determine, which should state the name of the maker and the amount of load carried.

Official numbers, which must be carried on the vehicle during the contest, will be furnished by the club.

All vehicles entered for the contest must report on Wednesday morning, May 20, at 8 o'clock, with their dead load on board, in running and operating condition, with their tanks full, at the weighing station, where they will be weighed by the committee's representatives, and gasoline, water tanks and fuel bunkers examined, and any shortages replaced, so that they will contain their full capacity at the time of starting.

Ampere-meter and volt-meter readings will be taken for electric vehicles.

The vehicles will then line up on Fifty-eighth Street, irrespective of numbers, and be started at three minute intervals.

Gasoline, kerosene, fuel oil, electricity, coal or coke consumed shall be furnished by contestants, and its amount will be measured and the cost of operation per ton-mile ascertained.

Where coal or coke is used as fuel it must be carried in bags, or in such form as can be conveniently weighed and checked by the committee's representatives.

All parties making entry for the contest shall appear before the committee of the Automobile Club on Tuesday, May 19, between the hours of 9 a. m. and 6 p. m., with their vehicles in commercial running and operating condition, with tools, fuel and supplies on board, but without dead load; they will receive their official numbers and proceed to the weighing station designated by the committee and have their vehicles weighed in that condition (without the driver) and an official seal affixed thereto. They shall also be required to appear at the weighing station with their dead load on board on each morning of the contest, to be weighed and checked by the committee's representatives.

The committee reserves the right to disqualify any contestant for any infraction of these rules.

All vehicles shall be stored over night at the depot provided by the club. They shall be delivered to the custody of the committee's representatives at the end of the first day's run and remain in their custody until taken charge of by the official observer on the morning of the second day.

Contestants may carry passengers (in addition to the driver and observer) at their option, but the weight of such passengers will not be included as part of the dead load.

On the first day of the contest each vehicle shall cover the route prescribed for its respective class without stops, except those that are involuntary and those which are provided for at the end of each stage.

On the second day of the contest each vehicle shall cover the same route travelled on the first day and will be required to make specified stops as noted in the list of classes.

(A schedule of where stops are to be made will be handed to contestants several days before the contest.)

The vehicles will be required to pull up to the curb and come to a full stop.

The observer will not begin to make the record until the wheels have stopped, and the vehicle will not start again until the observer has completed his record.

Medals will be awarded, based on economy in cost of operation and time consumed in covering the route, as follows:

A gold medal to the vehicle making the best performance in each class.

A silver medal to the vehicle making the second best performance in each class.

A bronze medal to the vehicle making the third best performance in each class.

## NOT SUCH A GRIM LAW

**Bad Enough, but the Pennsylvanian's Bill is a  
Sadly Chastened Measure—Its Text.**

Shorn of the greater part of its viciousness, the Grim automobile bill, which finally passed the Pennsylvania Legislature last week and awaits the Governor's signature, still contains many offensive provisions. In the process of amendment it has reached a stage where it is not much worse than the average anti-automobile legislation, however. To that fact it seems to have owed the withdrawal of practically all opposition.

The bill provides for the registration of all automobiles at a cost of \$2, and the licensing of all operators, the latter being required to pay \$3. The usual numbers are provided for, to be not less than 3 inches square, in place of the 6-inch originally called for, and registration certificates must always be kept in the vehicle ready for examination. Similarly, each operator shall carry his license and produce it for inspection by any constable or police officer. Two white and one red light must be shown, and a stop on signal clause is incorporated.

The maximum speed in cities and boroughs is placed at eight miles an hour, and outside of them at one mile in three minutes, or twenty miles an hour. At intersecting roads and sharp turns this shall be reduced by one-half. Violations of the provisions of the bill are severely punishable. For each offence—including the first—the penalty is a fine not to exceed \$100, or imprisonment in the county jail for not exceeding thirty days. It is provided that the automobile can be left in lieu of bail.

The most outrageous features of the original bill have been stricken out. Among these are the filing of a bond for \$5,000 by non-residents, the forfeiture of the vehicle, the division of the fine with informers and the placing of the fine at \$500.

The bill in full is as follows:

**Section 1.** Be it enacted that no vehicle commonly called an automobile, whether propelled by steam, gas or electricity, shall be operated or driven upon any public highway in any city, borough, county or township in this Commonwealth until the same has been registered by the owner or owners thereof in the office of the prothonotary of one of the counties of this Commonwealth as hereinafter provided.

**Sec. 2.** Every application for registration shall set forth in writing the name and residence of the owner or owners, the name of the manufacturer and the manufacturer's number of the motor vehicle to be registered.

**Sec. 3.** It shall be the duty of the prothonotary to enter every such application in a book to be kept for that purpose, and if all the requirements of Section 2 of this act have been complied with, to issue a certificate of registration to the applicant or applicants, for which registration the applicant or applicants shall pay to the prothonotary at the time of filing the application two dollars, which shall be the full cost of filing and entering the same and issuing the registration certificate, provided that in the cities

and counties in which the prothonotaries are paid by salary two dollars shall be paid into the city or county treasury for the use of the county.

**Sec. 4.** Every registration certificate issued must contain the name of the owner or owners, the name of the manufacturer, the manufacturer's number, the date of registry, the name of the prothonotary issuing it and the name and seal of the county in which the registry was made, with the number of the book and page in which it is entered. The registration of such motor vehicle shall not be valid until the certificate so issued is posted in a place in the motor vehicle so registered where it can be readily examined and the registration number is posted in a conspicuous place upon the back of the said vehicle, and the registry shall be null and void if the motor vehicle is used or operated upon the public highways as aforesaid when either the certificate or number are removed therefrom.

**Sec. 5.** No person or persons shall be allowed to use, operate or drive any motor vehicle as aforesaid upon any of the public highways of the cities, boroughs, counties or townships of this Commonwealth at a speed greater than eight miles an hour within the corporate limits of any of the cities and boroughs; outside the corporate limits of any city or borough as aforesaid the rate of speed shall not exceed one mile in three minutes. Provided, however, that upon sharp curves, sharp declines, upon the immediate approach of any person or team, and at the intersection of any cross road, the speed shall not exceed one mile in six minutes. And provided further, that nothing in this section shall permit any person or persons to drive an automobile at a greater speed than is reasonable regarding traffic danger or injury to property at any time or at any place.

**Sec. 6.** No person shall be allowed to use or operate any such motor vehicle upon any of the public highways aforesaid until the owner thereof shall have procured a license from the treasurer of one of the cities or counties of this Commonwealth.

**Sec. 7.** No license issued as aforesaid shall be valid for a longer period than one year. They may be issued on the first day of January or at any time thereafter, but shall expire on the thirty-first day of December next ensuing. The annual license fee shall be three dollars and shall be paid to the city or county treasurer for the benefit of such city or county. The treasurer of the city or county in which the treasurers are paid by fees shall be entitled to receive a commission of five per centum upon all such license fees paid into his hands, which shall be in full compensation for his services in issuing the license; provided, that this amount of license shall not apply to any city or other municipality in which the authorities have imposed a license fee for the same purpose, and provided, further, that no person shall be required to pay a license fee in more than one city or municipality in any one year.

**Sec. 8.** Every person using or operating a motor vehicle upon the public highways as aforesaid shall have displayed in a conspicuous place on the back of such motor vehicle, in large numerals not less than three inches square, the number under which it is registered. Every such automobile shall carry during the period from one hour after sunset to one hour before sunrise at least two lighted lamps showing white lights visible at least one hundred feet in the direction toward which such automobile is proceeding, and shall also exhibit at least one red light visible in the reverse direction. Every automobile shall also be provided with good and efficient brake or brakes, and shall also

be provided with bell, horn or other signal device. He shall sound a gong or other alarm when approaching a street crossing or road crossing, and shall have no more right of way or preference as to the use of such street or road than the driver of the vehicle about to be passed, but shall stop the motor vehicle when signalled to do so by the driver of any horse or other animal until the animal or animals have passed.

**Sec. 9.** Every person so licensed shall carry with him when using or operating such motor vehicle upon the public highways as aforesaid his license, and when so required by any constable or police officer of the Commonwealth shall produce the same and the certificate of registration for inspection.

**Sec. 10.** It shall be the duty of the constables and police officers of the cities, boroughs and townships of this Commonwealth to arrest upon view and without a warrant any person or persons violating any of the provisions of this act. Provided, that in the event of an arrest for a violation of any of the provisions of this act, if the defendant is unable to give sufficient bail for a hearing or for his appearance to answer at court the magistrate before whom he is first taken shall, in lieu of such bail, hold in custody the motor vehicle found in the possession of the defendant, and the court, after the trial of the defendant, if no sufficient bail according to law has been given in the meantime, shall make such order as to the disposition of such motor vehicle as may seem to it just and proper.

**Sec. 11.** All civil actions for damages arising from the use and operation of any motor vehicle as aforesaid shall be brought in the city or county in which the alleged damages were sustained, and service of process shall be made by the sheriff in person or by deputy in any part of this Commonwealth in like manner as process may now be served in the proper county.

**Sec. 12.** Any owner, lessee, bailor, bailee, operator or user of any motor vehicle as aforesaid violating any of the provisions of this act shall, in addition to his, her or their civil liability, be deemed guilty of a misdemeanor and, upon conviction thereof, shall for each and every offense be sentenced to pay a fine of not exceeding one hundred dollars or to undergo imprisonment in the county jail for a period not exceeding thirty days.

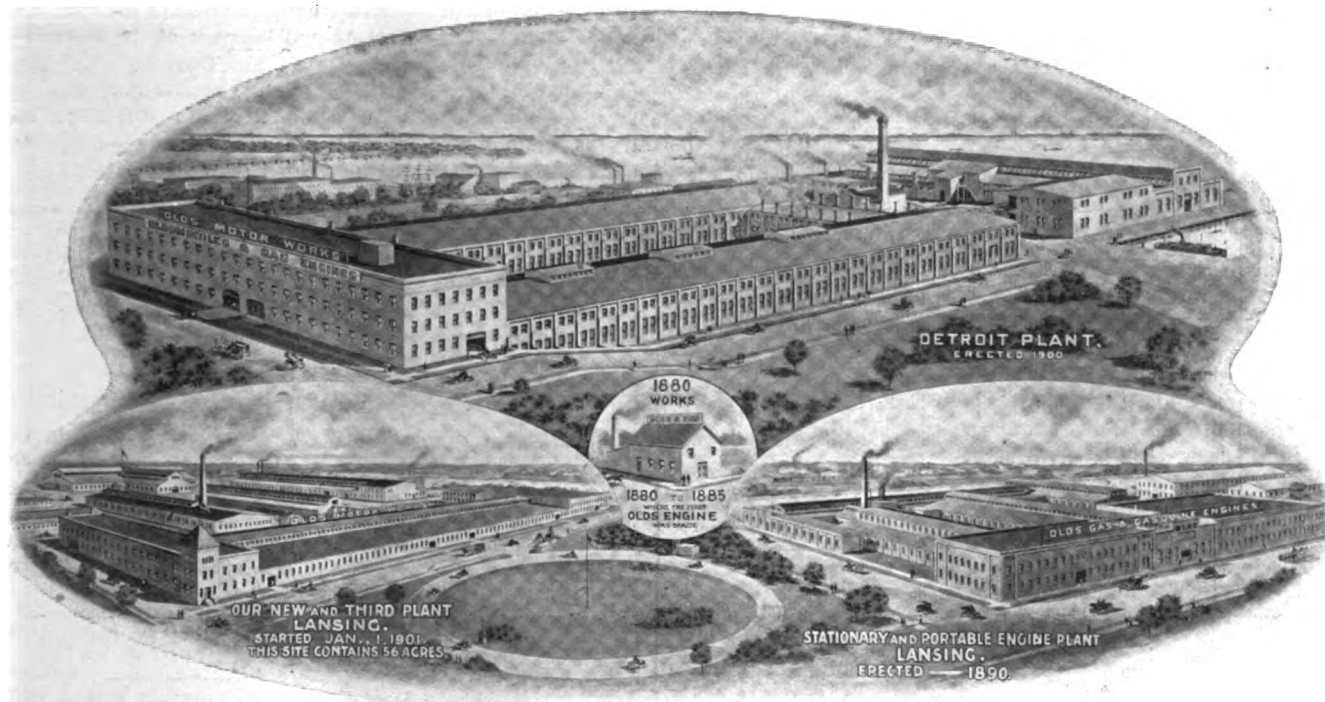
**Sec. 13.** This act shall not apply to any racecourse or private road, nor to any passenger railways or steam railroads confined to tracks, nor to steam or other street rollers, nor to any of the motor vehicles which any manufacturer or vendor of automobiles may have in stock for sale and not for his private use or for hire.

### Fight on in Albany.

On Friday last the Bailey automobile bill was passed in the New York Senate by a vote of 29 to 13. In the Assembly on Tuesday of this week the Committee on Rules reported it favorably. The Doughty bill, a companion to the Bailey measure, has not yet passed the Assembly. So much opposition to the measures has developed that the chances of their passage are by no means as good as they were a few weeks ago.

In the matter of speed regulations the bills are a slight improvement over the present Cocks law. In other respects, however, the change that would follow their adoption would be for the worse. The stop on signal clause is very offensive, it requiring the stopping of the engine also if requested. Licenses must be taken out, and are revocable after a fourth offence—a most vicious provision, and one that there is reason to believe is unconstitutional.

Where Oldsmobiles are Made.



To-day two large factories at Lansing and one at Detroit, Mich., are working day and night to supply the demand for the famous Oldsmobiles and the reliable Olds gas engines. Twenty-three years ago, when the Olds Motor Works was born, a small building measuring 18x26 feet at Lansing was sufficient for their needs. Nothing could better serve to illustrate the remarkable advance of the explosion motor.

The accompanying illustrations give but an idea of the immensity of the plants; they must be seen to be fully appreciated. The Detroit plant has a total floor space of 115,000 square feet; the River street plant, at Lansing, 100,000 square feet, and the newly completed factory at that place 125,000 square feet, giving a total floor space of 340,000 square feet. With an eye to the

future, the Olds people have also secured twelve acres adjoining the Detroit works and fifty-six acres adjoining the new Lansing factory. Specially designed machinery for making the various parts of the Oldsmobile and the gasolene engines fills every available inch of room.

As an example of the methods of the Olds Motor Works, it may be stated not only the tools, but much of the machinery with which the plants are equipped, was designed by the Olds experts themselves. The testing floors for the engine are fitted with every conceivable device for testing every detail of its construction, the Oldsmobile itself being subjected to similarly severe tests in the factory in addition to grade climbing and actual road tests, which enable the manufacturers to give the strongest guarantee with every machine turned out.

In addition to the enormous demand for gas and gasolene engines and the placing on the market of a 10 horsepower touring car, a fully inclosed gasolene coupe for physicians' use and a gasolene delivery wagon, the Olds Motor Works will this year make over 10,000 of their standard runabouts.

To adequately take care of the immense demand for their product it must be at once evident that a skilled and highly specialized force of mechanics is needed. Each man is practically a trained specialist in his line, and so thoroughly are the workings of this immense institution systematized that it is very rare indeed for the testing department to report even the slightest imperfection in the various working parts which enter into the formation of the engine or the completed automobile.

## What Buffum Made the Scorchers Pay.

Edward Buffum, New England representative of the Kirk Mfg. Co., had an unpleasant experience last week. He drove his new Yale touring car out to Newton and stopped for a few minutes, leaving the car at the curb well out of the way.

A few minutes later a car was driven in the opposite direction at headlong speed, its driver very much under the influence of the cup that does not cheer. He passed so close to the Yale car that he struck the axle, slewing the vehicle around and damaging it severely. Without waiting to see the extent of the damage he continued on at full speed.

Buffum rushed to a telephone and called up the next town and asked to have the police stop the man, and by prompt action they succeeded in doing this. He was badly frightened and promised to pay for the damage, which he was fully able to do, it ap-

pears, being the son of a wealthy Bostonian.

"That is a demonstration car," exclaimed Buffum, "and you will pay not only for the repairs, but \$25 a day as well until it is ready for use again," and he carried his point, too.

## Evidence of Kansas Enterprise.

That enterprising firm, Schollenberger Bros., Wichita, Kan., have added a well equipped automobile department, and built a shop 50x60 feet in the rear of their store. A speeding and testing device was also installed. It is a modification of the home trainer used for cycles, consisting of rollers set into the floor in pairs. On these the automobile is placed, run and tested thoroughly.

Two of the new Peerless touring cars reached Providence, R. I., last week and were delivered to their purchasers, H. B. Deming and E. R. Boynton.

## Nantucket Says "No" to 'Bus Line.

Nantucket, that delightful island just off the Massachusetts coast, still redolent of the whalers who formerly monopolized its peaceful shores and interior, says no to the automobile. It does not want it and will not have it. So it decided, almost unanimously, last week, when the proposition to license a line of automobile 'buses came up.

The petitioners were Lundle & Macy of New York, and they asked for authority to run a line of motor wagons over the State highway to Siasconset, at a 25-cent fare. They said they would use wagons designed for carrying passengers, and showed pictures of the vehicles which they had in mind. Remonstrants dwelt on the dangers attending the use of automobiles, and when the selectmen called for a show of hands of all who were opposed to the granting of the permit all but two of those present responded. The selectmen are expected to abide by the popular decision.

**Hudson County in New Quarters.**

The Hudson County Automobile Club, of Jersey City, N. J., met last week and elected these officers for the ensuing year: A. G. Evans, president; Dr. L. A. Opdyke, vice-president; Frank Eveland, secretary and treasurer; G. E. Blakeslee, E. B. Keisted, Dr. George Wilkinson and G. Wilson, governors.

On April 15 the club will take possession of new quarters at 2565 Boulevard, Jersey City. The governors will have notices sent to every club in this section to assist in stopping the fast driving that has become so notorious on the Hudson County Boulevard.

**Jenkins Speaks out Like a Man.**

At last a motorist with the courage of his convictions has arisen and asked a few pertinent questions regarding the rights and privileges of his class. He is a Washingtonian, Jenkins by name, and he appeared at a hearing given last week by the District Commissioners on a set of elaborate identification rules it is proposed to adopt.

"Why should motorists be singled out and numbered like dogs and tagged like convicts?" he asked. "The present laws are sufficient. All that is needed is to enforce them."

**Louisville's Club Incorporates.**

Louisville (Ky.) motorists have incorporated themselves under the name of the Hopkins County Automobile Club, with \$1,000 capital. The names of the incorporators are John T. Alexander, Charles Lindsay, Claude A. Morton, William C. Hollinger, Walter J. Dulin, Edwin G. McLeod, C. B. Long and Maurice K. Gordon.

**A. C. A. Adds to its Roll.**

At a meeting of the board of governors of the Automobile Club of America, held at the clubhouse on Tuesday, the president was authorized to appoint a committee of three members to confer with a similar committee of the National Association of Automobile Manufacturers on the chauffeur question. It is expected that similar action will be taken by the executive committee of the American Automobile Association.

The following new members were elected: Active—Herman B. Duryea, H. M. Crane, F. C. Armstrong, F. Gebhard, the Duke of Manchester, H. P. Haggerty, Temple Bowdoin, Frank A. Munsey, Albert Lemaitre, R. L. Beekman and William B. Mack. Associate—John S. Cox, J. H. Lindsay, Willard Thaw, Kirk La Shelle, and A. W. Comstock.

**Lawrence Organizes.**

A number of Lawrence, Mass., motorists met last week and formed the Lawrence Automobile Club. Some twenty members were enrolled, and the election of officers resulted as follows: President, James C. Forbes; vice-president, Charles H. Kitchin; secretary and treasurer, Charles E. Pearce; consulting engineer, A. J. Hainscom.

A. L. Lang, F. Schneider and A. J. Crosby were appointed a committee to obtain club quarters near the centre of the city.

A "silent silencer" is advertised by a transatlantic firm.

**Daytonians Drink "Hot Sparks."**

More than thirty members sat down to the first annual banquet of the Dayton Automobile Club, at Dayton, O., last week, and partook of a repast that was introduced in a menu that was distinctly motor vehicular. It began with a hot spark, alias a Manhattan cocktail, and ended with cylinder oil, as the coffee was termed.

Speeches were made by various members and guests, including an interesting talk on "Ignition" by V. G. Apple. W. H. Ogan offered to donate the site for a country club house, and the matter was taken under consideration.

**Foster Heads Maine Organization.**

Officers to serve for the ensuing year were elected at the annual meeting of the Automobile Club of Maine, held at Portland, Me., last week, as follows: President, Thomas J. Foster; vice-president, Henry B. Stickney; treasurer, George E. Sawyer; secretary, Howard Winslow; executive committee, the above officers and Henry M. Jones, Herbert A. Harmon, Maynard D. Hanson and Curtis H. Simonds.

**Long Islands "Warm" New House.**

On Thursday last the Long Island Automobile Club entertained its friends at the formal opening of its new clubhouse, No. 32 Hanson Place, Brooklyn. The rooms were thronged throughout the evening, and music and refreshments served to make the time pass pleasantly.

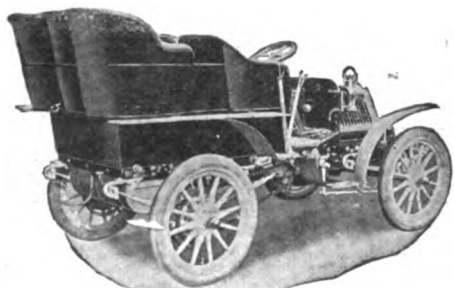
# Wanamaker Automobiles

America's Three Representative Motor Vehicles

Searchmont, \$2500

Studebaker, \$975

Rambler, - - \$750



SEARCHMONT TYPE VII.

See them at our Salesroom and Storage Station,  
138-140 East Fifty-seventh Street

**JOHN WANAMAKER**

## You Cannot Get More for Your Money

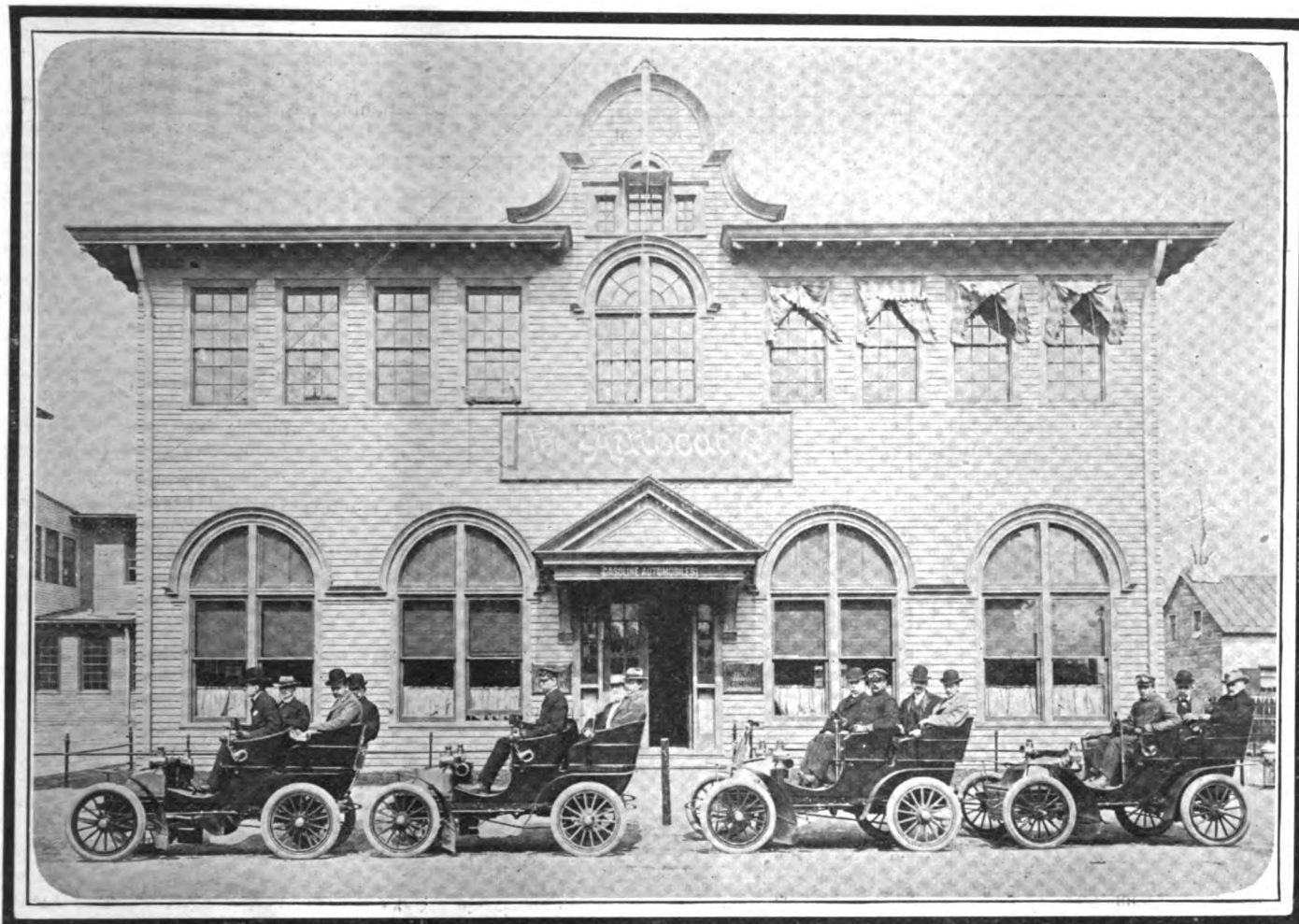
than by using \$2.00 of it to  
subscribe to

# The Motor World

In which each week appears a  
record of all that is best,  
brightest and newest in the  
world of mechanical traffic.



## Pennsylvania Road Commissioners Setting out for a Tour of Inspection.



Among other things John S. Clarke, of the Autocar Co., is one of the road commissioners of Merion County, Pa. Due to the fact, the other commissioners of the county last week made one of their periodical inspecting tours in up to date fashion and more quickly than a tour of the sort ever had

been made before. Mr. Clarke placed four Autocars at their disposal, and they inspected fifty-five miles of road in just what time they decline to state. The day was fine and the roads dusty, and the State Senator and other honorables who made up the party learned that frock coats and derby hats

hardly constitute suitable wear for such conditions and travel. The party dined at the fashionable Merion Cricket Club, and if any of them were previously afflicted with motorphobia it is safe to say that the tour materially reduced its acuteness. The picture shows the commission lined up in front of the Autocar Co.'s office at Ardmore.

## Miller's Mammoth Catalogue.

The Chas. E. Miller 1903 catalogue has made its appearance, and proves to be a well arranged and substantially bound book of some 130 pages. Between its covers practically everything known to the automobile trade is to be found. From the complete vehicle or motor to the smallest component part, together with accessories and supplies of every character, everything is described, and frequently illustrated, with the attention to detail that marks the Miller methods of doing business.

Running gears for all weights and sizes of vehicles, plain and machined drop forgings for hubs, steering connections and other parts, transmission gears, chains, engines, boilers, seamless shells for tanks, etc., burners, pumps, lubricators, gauges, mufflers, radiators and discs, hoods, dynamos and magnetos, spark coils and plugs, batteries, fenders, tires, pumps, lamps, horns, goggles, caps and clothing—these are but a few of the articles noted at random from the pages of the catalogue.

## Rushing a Big Order From Abroad.

As a result of the receipt of "hurry orders" for some of the 100 Century Tourist cars sold to their English agents the Century Motor Vehicle Co. last week made their first carload shipment. Single vehicles had gone forward previously, but the London agents, H. Reynolds Jackson & Co., cabled the Cen-

tury company to hurry the remainder of the cars to them. Arrangements were therefore made with the express company to ship by express from Syracuse to New York, and from there in the most expeditious manner.

The illustration depicts the express car loaded and placed at the head of the train ready to start on its long journey.







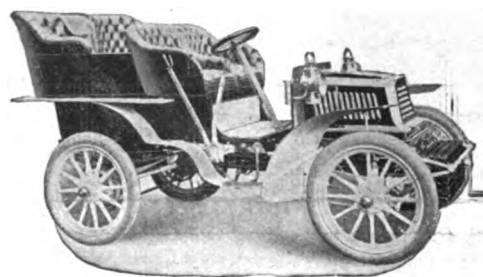
# PROGRESSIVE AGENTS

REPRESENT A

## PROGRESSIVE MANUFACTURER

The SEARCHMONT Automobile Company is a progressive organization in every respect.

FACTORIES fully equipped with the very latest and best machinery; a SHOP-SYSTEM which is not excelled; a PRODUCT which always leads in contests.



1903  
MODEL.

TYPE  
VII.

*The*  
**Searchmont**  
AMERICA'S LEADING AUTOMOBILE.

## Searchmont Automobile Company,

FACTORIES: SEARCHMONT (near Chester), PA.

North American Building,

PHILADELPHIA, U. S. A.

### AGENCIES:

JOHN WANAMAKER, New York.  
JOHN WANAMAKER, Philadelphia.  
H. B. SHATTUCK & SON, Boston.  
GITHENS BROS. CO., Chicago.  
JONAS AUTO. CO., Milwaukee.  
PRINCE WELLS, Louisville.  
CHAS. E. MILLER & BRO., Washington.

W. H. WEBER, Detroit.  
J. B. MALTBY, Corning, N. Y.  
ROCHESTER AUTO. CO., Rochester.  
CLEVELAND AUTO. & SUPPLY CO., Cleveland.  
CENTAUR MOTOR VEHICLE CO., Buffalo.  
SPECIAL MOTOR VEHICLE CO., Cincinnati.

MISSISSIPPI VALLEY AUTO. CO., St. Louis.  
MAR-DEL AUTO. CO., Baltimore.  
NEW JERSEY AUTO. CO., Newark, N. J.  
A. P. SHUMAKER, Pittsburg.  
I. W. DILL, Harrisburg, Pa.

## SOOT IN CARBURETTER

### An Unusual Cause of Trouble, What it Suggests and the Remedy Recommended.

"A mysterious phenomenon recently developed itself in the form of a faulty spray carburetter, which upon being opened was found to have its inner walls covered with a sooty or tarry film. There was also a deposit of what looked and smelt like dirty kerosene; yet it was known that only the purest gasoline had been used, and that gauze screens were duly in position within the induction pipe, so that there was nothing to explain how a flame could have travelled back along the pipe (through the inlet valve) so as to cause such soot to form in the carburetter. The mystery was so puzzling at first that, since its solution is now apparent, the explanation may be of interest to others who have had, or may have at a future time, a similar experience," says an experienced motorist.

"It is assumed as a condition to any such occurrence that the inlet valve must first have stuck open from some cause, and both the sooty appearance and the kerosene smelling deposit are the result of imperfect closure of the inlet valve, probably through the incursion of grit or some other foreign substance either in the guide or on the seat of the valve.

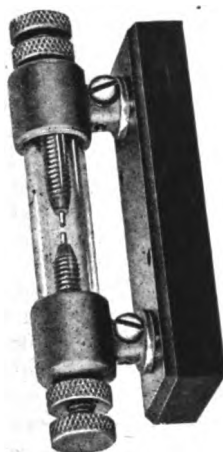
"If the grit or other obstruction gets between the guide and the valve stem, it tends to tilt the valve head, with the result that when one side of the valve returns to the seating tightly, the other is either out of contact or only loosely held against the seat. This means a loss of compression and also loss of explosion pressure, since the conditions are different from those pertaining to a weak inlet spring, which only causes a compression loss through sluggish closing, and occasions a blowing back of part of the charge through the carburetter. This blowing back occurs with the valve under the conditions under consideration, but in a lesser degree; for, whether the dirt is in the stem guide or on the seat, it is evident that it is very small, or the engine would not run at all.

"To explain the soot and deposit, however. The engine loses a small quantity of its compression, and consequently the explosion is less violent than normal. The explosion is also weakened by the loss through the imperfect seating of the inlet valve. But the gas that escapes during the explosion stroke has to pass through an exceedingly narrow opening (a sort of slit of infinitesimal dimensions extending around part of the circumference of the valve, and formed between the valve and seat, where it does not bear properly). The gases in the cylinder are at a very high temperature, and have just undergone a chemical change. It is a well-known scientific fact that if gas at one temperature be permitted to pass through a very

fine opening, the resultant temperature of the gas after emission is very much lower than its initial temperature. Hence the gases from the cylinder, consisting largely of carbon compounds at a high temperature, on expanding through the very fine opening between the valve and its seat, have their temperature greatly lowered, and this temperature drop is continued through the length of the induction pipe back through which the gas travels, until the final explosion of the gas into the chamber of the carburetter and the contact with the ice-cold walls (so rendered by the evaporation going on) cause the internal temperature of

### To Keep the Spark Plug Clean.

To the increasing number of outside spark gaps or "interrupters" Post & Lester, of Hartford, Conn., have contributed the one



shown by the accompanying illustration. It is a well made article, brass mounted on a hard rubber base, and with adjustable points. When it is desired to place the interrupter in a position where the spark may be seen at all times the use of a compensator is recommended.

the gases returning from the cylinder to be lowered to such an extent that the components capable of taking up a liquid or solid form are deposited upon the cold walls of the carburetter as soot and tar, the tar having a smell of kerosene owing to the fact that gasoline being derived from the kerosene series of hydrocarbons, incomplete combustion would naturally result in a residue of the heavier portion of the many different compounds which combine to form the mixture known as gasoline.

"The remedy would be to withdraw the inlet valve and seat, and just grind them slightly with rottenstone and oil, or knife-powder and oil. The case is evidently not bad enough for emery to be necessary. Also clean the valve stem and guide, and look carefully to see if it has been knocked in a burr in the guide. If these are apparent, clean off with a fine file (working the file longitudinally, for preference, as then the marks will follow the direction of the valve travel).

"There is one other cause from which bad seating producing the phenomenon under consideration might possibly result, and that

is from the inlet valve spring having either turned so that the end does not bear properly, or it might possibly be badly out of centre and binding against the stem. This is not very likely, but it is possible, and in any case, if apparent, should be remedied."

### Evolution of the Hand-car.

It is not an uncommon sight on many Western railroads to see the three wheeled cars used by inspectors driven by gasoline motors. The idea has been carried a step further, and the ancient and well-nigh universal hand car transformed into a self-propelled vehicle. The hand levers have given way to the explosion motor, to the infinite delight of section hands innumerable. The vehicle is called the railroad inspection car, and the purchasing agent of one Western road is reported to have recently placed an order for 100 of them for use west of Chicago.

The car is a great improvement over the ancient hand car, which is worked along the tracks by four men operating the levers. The automobile car weighs 500 pounds and has an engine of  $4\frac{1}{2}$  horsepower, capable of developing a speed of twenty miles an hour. It is controlled by the lever, and can be stopped, backed and started at the will of the driver. The wheels are fitted with flanges, and at either end of the body are handles by which the car can be lifted from the track.

With the exception of the motive power the greatest contrast between it and the old hand car is in the finishing of the body, which is of wood, varnished dark green or black. There are two seats upholstered in leather, with lazy backs, under which is a box for tools.

### To Repair Dented Tubes.

It is frequently the practice to put many of the tubes, such as those conveying the exhaust gases and the water for cooling, in the most inaccessible places. These being in such a position, are frequently indented by stones being thrown upon them from beneath the wheels. These dents cause considerable restriction to the free passage of the gas or water, as the case may be. The removal of such dents is a matter of some difficulty, as a general rule.

A method by which the difficulty may be overcome to a very great extent is the following: Take two hammers—one preferably with a soft face, or an ordinary wooden mallet, the other of the smooth faced engineers' type. The soft hammer should be held against one edge of the dent, and with the steel hammer strike light quick blows on the opposite edge of the dent. The blows should be given with a drawing motion, so that the face of the hammer passes along the edge of the dent. As the one hammer travels around the dent the other one should be moved in unison with it, so that it is always opposite the point where the blows are being delivered. By continually working around the edge of the dent in this manner it will be found that the tube can be restored to very nearly its original section.

**Bought to Save Richmond's Reputation.**

As an exponent of progress the automobile takes high rank. Merely to uphold the reputation of New Richmond, Ind., for possessing good roads, four citizens of the village recently purchased automobiles.

"About two weeks ago a crowd of us got together one evening and began talking about the fine streets we have and the fine roads about New Richmond, when some one suggested that we all ought to have automobiles," says Charles Kirkpatrick, one of the new motorists.

"The result of that suggestion was that four of us came over to Indianapolis and ordered machines. They are to be delivered this week. There is already one machine in the town, one of the old steam autos, and with the four new ones we'll have five—enough to take our entire population out riding in a very few trips. We can use the machines to advantage, for New Richmond is situated within easy distance of Crawfordsville, Lafayette and Attica, and we have the finest kind of turnpikes."

**Tells About the Goodriches.**

In addition to their pamphlet descriptive of the operation of Goodrich clincher tires, the B. F. Goodrich Company, Akron, O., have issued a companion, filled from cover to cover with the good things users have to say of these tires. The booklet is attractively gotten up, and will repay perusal.

**Quakers Form Co-operative Company.**

Imbued with the notion that they can save money, and perhaps even make a little, by doing their own repairing, etc., nine Philadelphia motorists have formed a little company of their own. They have applied to the Secretary of the Commonwealth for incorporation papers for the South Broad Street Automobile Co., and propose to begin business right away.

R. H. C. Brock, No. 1,612 Walnut street, and Dr. Wharton Sinkler are the leading spirits of the optimistic nine. In all the party own fifteen automobiles, and these they propose to store, repair and furnish gasoline and other materials for.

"It is cheaper to go into the business," explained one of the company, "than it is to pay charges for storage, supplies and repairs. You can figure out that it costs us pretty heavily to keep them going. Gasoline, storage fees, oil, repairs and general supplies make each of these machines about as expensive as a carriage and pair to maintain.

"We have come to the conclusion that it will pay to do our own work, hire our own men, buy our own supplies and find storage room for our own and other machines. Later we may decide to do outside work."

On Saturday last C. W. Nason, of this city, started in his automobile on a week's hunting trip on Long Island. He drove direct to Eastport, and from there will make daily trips to selected localities.

**The Mystery of No. 121.**

One rather unfortunate phase of the numbering system came to light in Cleveland the other day. Several times an automobile with No. 121 attached to it was driven at a high rate of speed and hailed by the police without being halted. Finally a search was made, and it was found that No. 121 had been taken out by R. R. Owen. The latter was approached, but denied that the car was his. He had been the owner of No. 121, but it had dropped from his car and had been lost. Some one had evidently picked it up and attached it to his car, then, feeling secure, had driven as he pleased. The police are watching for the present possessor of No. 121, and R. R. Owen is wishing them success with great fervor.

**Forming a Rhode Island Chain.**

Under the direction of Secretary H. H. Rice, of the Rhode Island Automobile Club, arrangements are being made for the establishment of charging and storage stations in a number of cities and town throughout the State. Already arrangements have been made in Pawtucket, Warren and Bristol, and within a few days stations will be announced in nearly all the towns visited by local automobilists. The lack of charging stations has been one of the greatest inconveniences to owners of electric vehicles in the past, and the arrangements now progressing will be most heartily welcomed.



# DARRACQ

*THE FAVORITE OF TWO CONTINENTS.*

**8, 9, 10, 12 and 20 H. P.**

STARTS FROM SEAT.

MECHANICALLY OPERATED VALVES.

LARGE SEATING CAPACITY.    LARGE WHEELS.

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PHILADELPHIA.    PITTSBURG.    BOSTON.

20 H. P., 4 CYLINDERS, TOP DETACHABLE.

## LOSS OF COMPRESSION

### The Many Likely Sources of Leakage and how Trouble may be Avoided or Corrected.

Poor compression is a constantly recurring trouble in internal combustion engines, and it is not always easy to locate the source of leakage. Good compression and engine efficiency are synonymous terms. The compressed gas must leak away at some point, provided that the engine castings are sound; the sources of this leakage are either via piston rings, exhaust valve, inlet valve, inlet valve joint, or the point of cylinder cover. Leakage through a broken sparking plug porcelain or through a defective compression tap is easily located.

Piston ring leakage may occur in many ways, and is more often due to their constructional defects than to the ordinary wear of working. Consider for a moment. As engineers we insist upon the cylinder bore being practically perfect, both smooth and circular; but why are we not equally accurate in turning piston rings? They are turned and bored circular, mostly with a thick and a thin side; then we cut a gap out of them at their thinnest part, producing ends hardly strong enough to resist breaking; finally we close up the gaps, which makes an oval set of rings which we compress into our circular cylinder, and trust to themselves bedding to the bore thereof.

Such rings must spring unequally to the circular cylinder, resulting in excessive wear upon such parts of the rings as spring hardest to the wall until they have bedded themselves, which opens the saw cut to a gap, thus producing another way for gas leakage, the last condition being worse than the first, particularly if the rings should turn round all gaps in line, for they are always cut in the thin sides of the rings where the rings wear narrowest sideways in the piston grooves; hence it is obvious that such rings contribute to an oftentimes serious leakage of compression through the saw cut gap and behind the thin part of the rings via the piston grooves. I contend, says a man who considers himself competent to speak on the subject, first, that piston rings ought to be of equal sectional area all round, to provide for equal wear sideways in the piston grooves; hence they should be bored and turned concentric, not eccentric, as is the usual practice. Second, after rings are bored and turned nearly to finished diameter, the gap should be cut out, the rings sprung close and held in that position at the points while they are finished circular to piston and the bore of cylinder. Thus we get rings of equal section, fitting equally deep into the piston grooves, which tends to equal wear sideways, and, most important, a practically perfect fit into the cylinder bore. I have turned scores of rings in this manner years

ago in steam engine practice; it is a matter of surprise to me that such accuracy is dispensed with in internal combustion engine practice.

Concentric turned piston rings, being stronger at the saw cut, are not liable to chip at the points as other rings frequently do, especially when pegged at the saw cut to prevent turning round in the piston grooves. Pegging rings which are thin at the points only further increases the liability of the points to chip off. However, it is questionable if it is worth while to peg any rings in the piston grooves; certainly a properly constructed ring does not need it—it is sufficient, as a rule, to space the saw cuts equidistantly from each other. But in saw-cutting three rings for a piston there may be an advantage gained by cutting two of the rings angular in one direction, and the centre ring angular in another direction, thus giving at least a zig-zag course to the compressed gas attempting to escape in the unlikely event of all saw-cut gaps getting into line.

Having indicated the faults in piston ring construction, the remedy is obvious, though it costs considerably more time and trouble to make concentric circular finished rings than to make the eccentric oval finished rings.

Exhaust valve compression leakage may also occur in several ways. The valve stem may be bent just beneath its head where the heat of the products of combustion has burned and so weakened the stem. In such a case it will usually be noticed that the valve head and valve seating will also be more or less burned. Now, before attempting to grind in any exhaust valve, it should be ascertained if the stem is perfectly straight, by revolving the valve between the centres of a lathe, or, if the valve lacks centre holes, by revolving its stem in a groove filed across an iron block. If the valve stem is bent, it should be straightened; and if it is burned and bent just beneath the head, and straightens there quite easily, it should be thrown on the scrap heap, because it is evident that the burning has taken the carbon out of the steel stem and left it like common wrought iron, in a condition to easily bend again.

Exhaust valves stand the heat much better if the heads are of cast iron; indeed, more reliable exhaust valves may be made in the repair shop than many of the valves supplied by the makers of the engine. These heads should be made of close-grained cast iron. Get a length cast on end, to avoid blow-holes; portions may be roughly turned and cut off the best end of the casting, then drilled in the centre, tapped, and a steel stem screwed into them, allowing a portion thereof to protrude through the head, on to which a nut is screwed up to the head and riveted there. The bend is then turned up with its stem, the latter being tapered just beneath the head as much as the proper closing of the valve will allow; it is then ground into position on the seating, first

taking care that the seating is in good condition, and if it is not so, then the seating must first be trued up by means of a rose bit cutter, which may be made in the workshop. This cutter should be made from a long piece of solid steel, with a large number—and preferably an odd number—of cutting edges to suit the taper of the seating; beneath the cutting portion the steel is turned small enough to fit and be revolved in the valve stem hole, as a guide while cutting; above the cutting portion the steel is turned to fit, and be revolved in a special temporary gland constructed to suit the design of the engine. Corn emery is an excellent medium for valve grinding, but the faces should be finally finished with pumice powder.

Exhaust valve stems are usually too small in diameter in the older type of engines; therefore, in renewing a valve as described, it is advisable to make a thicker steel stem, and bore out the guide hole to suit it if possible.

If an exhaust valve is properly ground on to its seating, it will retain compression for a much longer period than if this seemingly simple operation is carelessly performed. The valve face and seating should not be too wide, and the faces should be ground together so as to fit the hardest upon that portion which is nearest within the combustion chamber; thus the compression cannot start to escape; whereas if the valve is carelessly ground, it may fit all round the outer portion of the faces, but yet have a slight space between that portion of the faces which is nearest within the combustion chamber, thus permitting the exploding gas to insinuate itself between them, with the result that the valve is soon in a leaky condition again.

Inlet valve compression leakage may also be due to several defects. Let us take it for granted that the faces are a good ground fit, finished with fine pumice powder and oil; and although inlet valves need less frequent attention in this respect than exhaust valves, yet the remarks re the grinding operation are equally applicable to inlet valves. As an automatic inlet valve has a much weaker spring to hold it closed than an exhaust valve has, and usually a much shorter guide hole for its stem, it is therefore essential that its stem should be a good sliding fit in the guide hole, otherwise the valve will "rock" upon its seating when closing, and will continually leak compression in that condition, more especially if its spring is fitted in such a manner that it tends to pull the valve stem sideways in the shaky hole. These latter remarks are not so applicable to the mechanically-operated inlet valve, seeing that it is closed by a much stronger spring; indeed, it might be considered too premature at present to speak of repairs to such a modern innovation as the mechanically-operated inlet valve, were it not true that it has operated for so many years in stationary gas engines, and has been known to leak compression quite as much as the

automatic inlet valve if not lubricated and kept in accurate working condition.

A very insidious cause of compression leakage, oftentimes difficult to locate if unsuspected, results from the inaccurate turning or machining either of the joint faces of the inlet valve body, or of the gland, or other similar contrivance designed to fix the valve down. If this gland is not true upon its face, and is stronger than the valve body, it will slightly strain or bend the valve seating out of circularity when screwed down, thus allowing a leakage between valve and seating not at all apparent when the screw pressure is removed and the valve taken out for examination. The remedy is to true up the faces upon which the screw pressure is applied, so that they fit fairly upon each other, and also to see that the copper-asbestos washer is in good condition if one exists under the valve.

Personally, I consider the mechanically operated inlet valve preferable to the suction valve, although very plausible reasons may be submitted for or against either system. For instance, the mechanically operated inlet valve opens exactly at the commencement of the intake stroke, thus admitting the maximum amount of mixture to the cylinder, but the suction valve requires the piston to recede a little to produce a partial vacuum before atmospheric pressure opens its spring to commence intaking the charge, and although the mechanically operated valve has the disadvantage of extra cost of the additional cams, etc., to operate it, the suction valve has the serious and most troublesome disadvantage that even if the correct weight to compress the spring of a suction valve for any given engine is known to the repairman (which is very unlikely) it is most probable that the spring will continually weaken in work, and as the compression, and consequently the suction, are constantly altering slightly, it is practically impossible to maintain an automatic valve spring at that correct strength which shall at all times be most suitable to the efficient working of the engine. An inlet valve spring which is too weak is indicated by a small amount of cylinder oil getting into the mouth of the mixture supply tube.

A seven horse power two-cylinder car was recently examined, the owner stating that it lacked power, and would not climb a hill. After we had ground in all the valves the compression was much improved, but still it was better in one cylinder than in the other one—due, no doubt, to piston ring defects which there was not time to remedy; but still the engine would not pull well, and upon the defect being traced to exist in one cylinder only, the inlet valve springs were tested to be of equal strength against each other, and after various experiments in running the engine, a new spring twice as strong as the other one, was finally fitted to the inlet valve of one cylinder. This cured the trouble for the time being, but it is most unsatisfactory to consider that such a condition cannot give permanent reliability to

that engine; whereas with mechanically operated inlet valves one can always be sure of the exact point of their opening and closing just as in the case of an exhaust valve, but it is essential that the operating cams are correctly designed for rapid closing of the valve at the end of the piston stroke.

Still another occasional source of compression leakage is via the cylinder cover joint; this is usually easy to locate, but there are many old type twin-cylinder engines, the cylinder bores of which are so close together that the narrow space between them makes it difficult to preserve a gas-tight condition, and to prevent the compression escaping undetected either from one cylinder to the other one, or from either cylinder into the water jacket, and, vice versa, a leakage of water into the cylinder at each suction stroke. Although it has been experimentally demonstrated that the explosive force of the charge within an internal combustion engine may be somewhat increased by the addition thereto of such substances as picric acid, and also by small quantities of water injected into the cylinder to be instantly flashed into steam, yet I think that as repairmen we are more wisely advised to avoid for the present such aids to trouble, by keeping both picric acid and water out of our cylinders.

Undoubtedly the best cylinder cover joint is produced by scraping and grinding the two faces together into practically perfect contact, and then screwing the cover down, with merely a film of doubly-boiled linseed oil between the faces. Unfortunately there arise so many untoward circumstances in the life of multi-cylinder engines—not the least of which is unequal expansion of the faces, caused by the heat, resulting in a face-to-face joint always leaking at some spot sooner or later. However, when such leakage is discovered, it is by no means necessary to go to the other extreme, and insert a thick asbestos joint. If the faces are in a very bad condition, and time, or the repair price, will not allow of their being refaced, a good temporary joint may be made with very thin cardboard asbestos soaked in boiled linseed oil; but a better joint may be made if the faces are fairly good by cutting a joint out of best quality white drawing paper, well soaked in boiled linseed oil, and if the leakage has been from one cylinder to the other through the narrow joint between them, I have made certain of stopping such leakage by smearing also some very thin red lead upon the narrow space only, because that space in old-type engines is always overheated, as the water does not circulate between the cylinders.

#### Not Wholly out of it.

Although the Long Island Motor Co. has been, in a sense, combined with the Brooklyn Automobile Co., it has not lost its title or existence. It will continue to make gasoline motors on order and do work of a similar nature.

#### Valve Springs may be too Strong.

Some engines can be improved by altering the strength of their inlet springs. If the spring is too weak the fault is quickly located by the resultant back firing. When, however, the spring is too strong, the engine apparently may run well, but it certainly will not be giving its best results. The loss of power is more especially noticeable when the engine slows down under a heavy load (as uphill). Here, owing to reduction of piston speed and consequent lessening of the suction produced by it, the overstrong spring prevents a full charge of mixture from entering the cylinder.

In this latter case a very weak spring—even one that would permit back firing at high speed—enables the engine to climb hills which otherwise are too much. From this result it is clear that the inlet valve spring could be weakened for uphill work with advantage.

There are engines fitted with an arrangement by means of which the strength of the inlet spring is increased by moving a handle in a suitably notched quadrant, conveniently arranged on the steering column, the result being to throttle the engine.

If in the above case the spring were left below the normal strength, and pressure applied by "notching up" sufficient to prevent back firing at usual speed, on the engine slowing at a steep hill the extra pressure thus applied could be taken off, and a considerable gain in hill climbing power would be noticed.

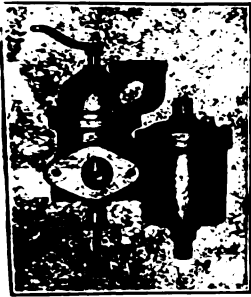
A very large number of engines would stand a turn or two cutting off their inlet springs without causing them to back fire, and with a surprising increase of power resulting. This is of more importance to owners of small powered cars, where just this little improvement makes the important difference between climbing easily or otherwise.

#### The use of Condensers.

When condensers are used with the idea of returning condensed steam in the form of water to the boiler so that the car can be run longer distances without replenishing the water tank, the utmost care should be taken to see that the oil separator and filtering arrangements are kept in perfect working order, as the smallest trace of grease in a boiler is always accompanied by a loss of steaming efficiency. Not only so, but the boiler may be seriously damaged. It will be seen at once that the steam, after it has passed through the cylinders, which are of necessity continually lubricated, must carry with it a certain amount of oil, and this, unless the separator and filter are in good trim, will get into the hot well, and from it be pumped into the boiler. Quite apart from the reduction in steaming efficiency, there is the possible damage to the generator, which partakes in general features of the symptoms which would be shown if the water were allowed to get too low.



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Will positively supply highly explosive mixture from any grade of gasoline. Get a good carburetter. Get ours. It will increase the power of your motor. Money back if not satisfactory. Write today.

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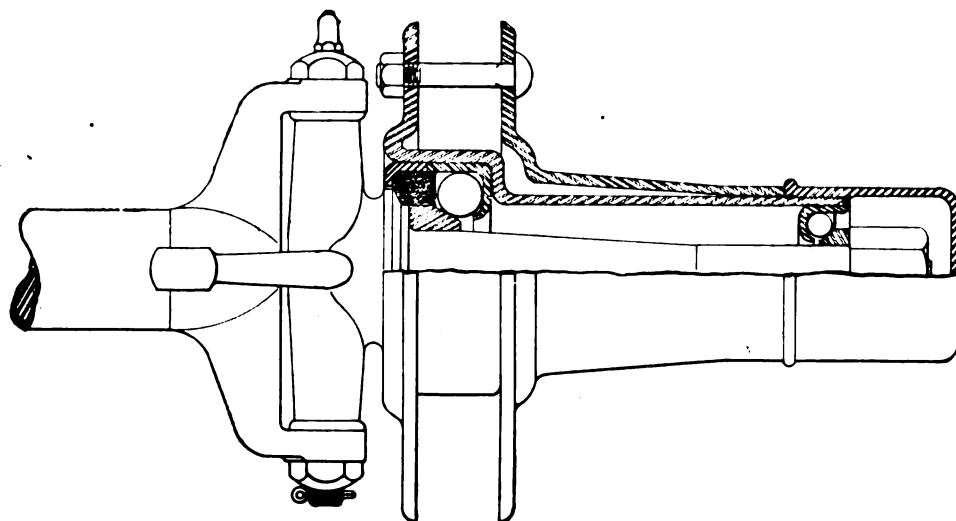
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## THE PEERLESS,

LOOK AT THESE FEATURES.

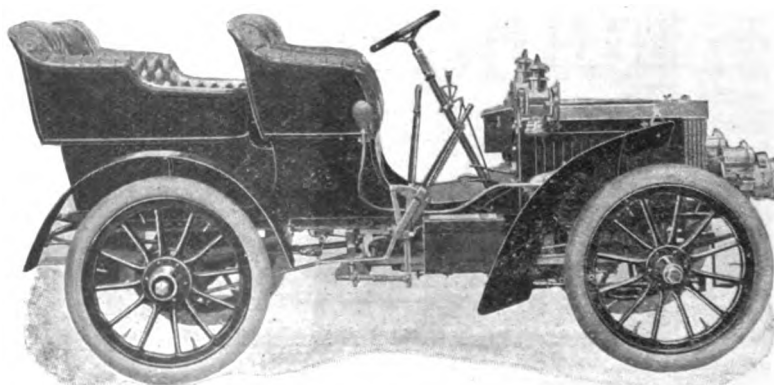
Vertical Motors in Front, Universal Shaft, Bevel Gears, Spray Carburettors,  
A Muffler which Muffles, Dust Proof Ball Bearings, Powerful Brakes,  
Removable Tonneau, Low Center of Gravity, Automatically  
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mercial St.; Joplin, Mo., C. E. Hart; Newark, N. J., 141 Halsey St.; Ligonier, Ind., W.  
B. Inks; Alliance, O., Standard Bolt & Manufacturing Co.; Rochester, N. Y., Rochester  
Automobile Co., 150-170 South Ave.; Hartford, Conn., Jonas Automobile Co., 726-728  
National Ave.; Binghamton, N. Y., Binghamton Automobile Co.; New Haven, Conn.,  
F. B. Bradley, 668 State St.; Providence, R. I., H. G. Martin & Co., 196-200 West Ex-  
change St.; Cleveland, O., Foster Automobile Co., 153 Prospect St.



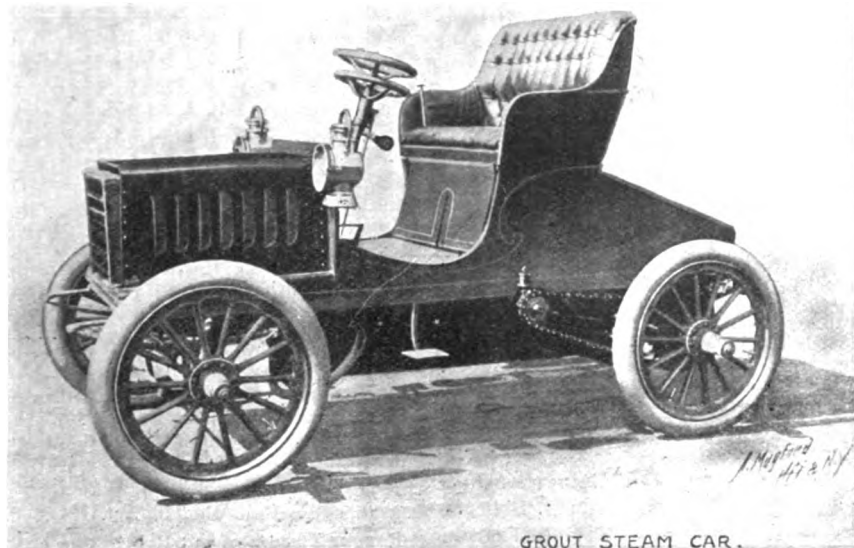
"The 1903 Peerless."

### Grout's "Frenchie" Runabout.

One of the first concerns to perceive the demand for steam cars designed on what are termed gasoline lines, Grout Bros., Orange, Mass., have worked consistently to meet this demand. They have followed up their steam touring car, which attracted so much attention at last winter's shows, with a runabout, appropriately named the "Frenchie." It is also furnished with a tonneau body.

The lines and general appearance of the "Frenchie" appeal at first sight. The long wheel base, the business-like look of the car, with its hooded front and low and rakish body and angle iron frame, stamp it as a winner. An examination of its power plant and details of construction confirm this favorable impression.

Both the boiler and the engine are located in front, the latter being positioned horizon-



GROUT STEAM CAR.

tally. The boiler is equipped with the Grout patented down draught, which carries the heat and odor away from the occupants of the car. The engine is completely encased, affording a much desired protection from outside shocks. It is of ample power, insuring the maintenance of good speed, even on the steepest hills. The engine drives direct to the countershaft, with transmission to the rear wheels by means of individual chains.

Wheel steering is used, the steering rod having fitted on it a second wheel used as a throttle. This throttle works up and down, and rotates either with the steering wheel or independently, as may be desired. Ample provision is made for the carriage of supplies, the fuel tank holding sufficient gasoline to run the car 150 miles.

Grout Bros. are prepared to make immediate deliveries of this new model, and anticipate a good trade in it. They are also building a steam racing car, which is expected to possess wonderful speed.

### Cross Diameters of Tires.

Among racing motorists there is a strong feeling that tires of too large cross diameter are not desirable. Four inches is a favorite size, and is being used on a number of high speed cars.

"Even for the heaviest cars I think it is a mistake to use anything larger than four inches," said L. P. Mooers to The Motor World man on Monday. "The larger the diameter of the tire the greater the heating will be, and that is one of the worst things that can happen to a tire.

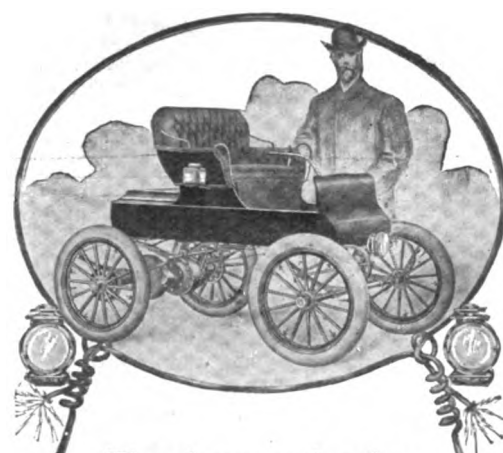
"Of course, you must have a tire large enough to take up a great deal of the vibration, and on a big car nothing but a big tire will do this. But, as I said, I draw the line at four inches. That makes a good compromise size, and the shocks it won't absorb have got to be taken by the car and its driver."

### Another Substitute for Pneumatics.

One of the many tires devised as a substitute for the regulation pneumatic has a solid rubber tire fitted to a metal rim, which in its turn bears upon an inflated rubber tube confined by metal flanges bolted to the side of the ordinary wood felloe. To prevent the rim and tire, which come in contact with the road, creeping and wearing, the inner tube bolts are placed through them at certain intervals, the rim carrying the solid rubber tire being slotted to allow of the necessary up and down movement without permitting creeping. The device is of British origin.

### Cannon Building a New Car.

George C. Cannon, the Harvard student whose specially built steam car last summer made a number of records that were not allowed by the A. A. A. on account of its not being controlled by one man, is at work on a new car. He expects to have it ready for the Readville, Mass., races on Decoration Day.



The pleasure of going when and where you wish safely, smoothly, silently, without elaborate preparation or tiresome interruption is characteristic of

## NATIONAL ELECTRIC VEHICLES

Perfection of service due to extreme simplicity of construction. A child can operate a "National." Peculiarly the "ready" automobile for practical, every day, all-the-time use.

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**National Motor Vehicle Co.,**  
INDIANAPOLIS, IND.

## The Week's Patents.

724,834. Ball Bearing. Edmund J. Farr, Boston, Mass. Filed July 11, 1901. Serial No. 67,870. (No model.)

Claim.—1. A ball bearing comprising a hub, end plates for said hub, an axle extending through said end plates, members forming spaced raceways concentric with the axle, sets of spaced balls in said raceways and in contact with the axle, revoluble separating rods extending parallel with the axle and passing between adjacent balls in each set of balls, and plates held between the end plates of the hub and the members forming the raceways and in which the said rods are journaled, as set forth.

724,836. Steering Gear for Vehicles. Joseph Field and James Field, Newton Reigley, near Penrith, England. Filed Apr. 28, 1902. Serial No. 105,033. (No model.)

Claim.—1. A road vehicle the rear wheels of which are mounted on short spindles or axles the inner ends of which are provided with heads or hubs having upwardly directed shafts which are passed through bearings secured to the truck or frame, a quadrant gear secured to one of said shafts, a horizontal worm shaft operating in connection with said gear, forwardly and backwardly directed arms secured to the heads or hubs of the wheel axles, transverse rods connected with said arms, whereby the operation of the worm shaft will turn the wheels laterally, and a locking device operating in connection with the vertical shaft opposite, that with which the quadrant gear is connected to prevent the turning of said wheels laterally, substantially as shown and described.

724,896. Attachment for Rims of Traction Wheels. George A. Lavender, Roanoke, La. Filed Jan. 31, 1903. Serial No. 141,345. (No model.)

Claim.—1. In combination with a traction wheel provided with lugs, an attachment or protector therefor composed of solid and bar links alternately disposed and pivotally connected, the solid links being of wedge form in side view and adapted to fill the space between adjacent lugs and the bar links embracing opposite ends of said lugs and serving to prevent lateral displacement of the attachment, substantially as set forth.

724,945. Ignition Plug for Explosive Engines. William Roche, Jersey City, N. J. Filed Aug. 16, 1902. Serial No. 119,843. (No model.)

Claim.—1. An ignition plug for explosive engines, made up of a body flanged at one end so as to form a chamber for gases, independently insulated conductor rods extending through said body, and a clip device in contact with one rod and approaching the end of the other to form a sparking point and having a branch extending between the insulated tubes of such rods within the chamber, for the purpose set forth.

725,067. Storage Battery. William Gardiner, Chicago, Ill., and James R. Macmillan, Menominee, Wis., assignors to Northwestern Storage Battery Company, a Corporation of Illinois. Filed Jan. 31, 1902. Serial No. 91,878. (No model.)

Claim.—1. The combination in a secondary cell, an inner tubular electrode containing active material in a finely comminuted form, washers of insulating material on said electrode acting as separators, a fabric lining in each of said tubular electrodes and a complementary electrode also in tubular form within which said last named electrode fits.

725,087. Oscillating Piston Explosive En-

gine. James A. Jenney, Fairhaven, Mass. Filed Sept. 18, 1902. Serial No. 123,835. (No model.)

Claim.—1. The combination with a cylinder having a transverse stationary abutment dividing it into two equal chambers, a fuel passage in each abutment and ports from each passage to both the chambers, a centrally mounted swinging piston having arms, one extending into and dividing each chamber, a rotary admission valve seated in each abutment passage and connections operated by the piston for continuously rotating the valves, the valves being set so that an explosive mixture is supplied in succession to the four divisions of the cylinder formed by the pistons and abutments, and means for exploding the charge in succession, whereby each charge being compressed serves as a cushion for a charge being exploded.

725,104. Ignition Chamber for Gas Engines. Abbot A. Low, Brooklyn, N. Y. Filed June 11, 1901. Serial No. 64,111. (No model.)

Claim.—1. The combination with the ignition chamber and its hydrocarbon inlet, of a hood surrounding said chamber and inlet and having an outlet at a point at right angles to said inlet, a hood around said outlet, a shell surrounding said first mentioned hood, inlet and outlet, and forming an airtight jacket, and a cowl mounted above a vertical outlet from said first mentioned hood.

725,106. Acetylene Lamp. Harry Lucas, Birmingham, England. Filed July 28, 1902. Serial No. 117,308. (No model.)

Claim.—1. In acetylene lamps for motor cars and other vehicles, the combination consisting of a vertically disposed well tube in permanent attachment with the lamp body, a nipple at the bottom of the said well tube, a gas conduit in permanent connection with the said nipple, and a gas generator having an outlet aperture which automatically joints with the said nipple on the insertion of the generator within the said well tubes, and disjoints on the withdrawal of the same, the said joint being outside the water chamber of the generator, substantially as described.

725,140. Device for Maintaining Constant Speed in Electric Motors. John G. Roberts, assignor to Harry J. Fox, trustee, Detroit, Mich. Filed Jan. 2, 1902. Serial No. 88,245. (No model.)

Claim.—1. A direct current electric motor having a short circuit connecting opposite points of one of its windings, and a timed circuit controller in the short circuit to keep the motor at uniform speed, substantially as described.

725,155. Apparatus for Manufacturing and Vulcanizing Rubber Tires. Frank A. Selberling, Akron, Ohio. Filed Jan. 18, 1902. Serial No. 116,051. (No model.)

Claim.—1. A machine for the manufacture of rubber tires, etc., consisting of a grooved drum revoluble on its axis and means for heating the same as desired.

725,171. Means for Repairing Punctured Pneumatic Tires. Charles R. Sutton, Dayton, Ohio, assignor to Jesse M. Heckman and Harvey Snell, Union, Ohio. Filed June 14, 1902. Serial No. 111,636. (No model.)

Claim.—The combination in means for repairing punctured pneumatic tires, of the tube having an exteriorly tapered inner end, and interior and exterior shoulders at an intermediate point of its length and also having the flat handle flange *d* at its outer end, and the awl having the cone shaped point at its inner end, and the shoulder at an inter-

mediate point of its length, and also having the flat handle flange *g* at its outer end; the awl being of greater length than the tube, whereby, when the shoulder on the awl brings up against the shoulder in the tube, the handle flange *g* rests in rear of the handle flange *d* with a space between them.

725,191. Petroleum Engine. Robert O. Allsop, Orpington, England. Filed Dec. 2, 1901. Serial No. 84,466. (No model.)

Claim.—1. In internal combustion hydrocarbon engines the combination with an engine working on the four stroke cycle, of a fuel vapor pump connected therewith to make the same number of strokes as the engine and arranged to deliver the vapor to the engine only on every fourth stroke of the pump, substantially as described.

725,218. Storage Battery. Rufus N. Chamberlain, Depew, N. Y., assignor to Gould Storage Battery Company, New York, N. Y., a corporation of West Virginia. Filed Aug. 13, 1902. Serial No. 119,525. (No model.)

Claim.—1. The combination with a tank or receptacle provided with a bottom, side walls, and end walls which extend upwardly above the tops of the side walls, of battery plates arranged in said tank or receptacle and provided with necks which project laterally over said side walls, and a cover for said tank or receptacle, which is supported by said end walls, substantially as set forth.

725,223. Variable Speed Gear. Middleton Crawford, London, England. Filed Dec. 12, 1902. Serial No. 134,964. (No model.)

Claim.—1. In variable speed gear the combination with a driving shaft, a driven shaft and a rotatable casing having an external conical surface at each end of means for locking the casing by one of its conical surfaces to the driving shaft, means engaging with the other conical surface for holding the casing stationary, a compound pinion carried within the casing, a pinion on the driving shaft gearing with one part of the compound pinion, pinions gearing with the other parts of the compound pinion, means for locking a desired number of these pinions to the driven shaft and means for holding one of the pinions stationary, substantially as and for the purpose described.

725,246. Ball Bearing. Albert E. Henderson, Toronto, Canada. Filed July 14, 1902. Serial No. 115,513. (No model.)

Claim.—1. In a ball bearing, the combination of two bearing rings, anti-friction thrust means carried by the bearing rings, bearing balls arranged therebetween, and a spacing device for the bearing balls supported by said bearing balls, said spacing device having pairs of rollers engaging the bearing balls one above and one below the line joining the centres of the two adjacent bearing balls.

725,250. Brake for Automobiles. Ludwik L. Hoffman, New York, N. Y. Filed Jan. 3, 1903. Serial No. 137,632. (No model.)

Claim.—1. An automobile brake, comprising a hand lever, a rockshaft, a link connecting the hand lever and said rockshaft; brake arms mounted on the rockshaft; wheels respectively mounted in and peripherally frictionally engaging the several brake arms; and leading wheels mounted in said brake arms.

725,285. Driving Gear for Engines. Charles Phillips, New Bushey, England. Filed Oct. 30, 1902. Serial No. 129,455. (No model.)

Claim.—1. Means for overcoming dead centres comprising movable or reciprocating members, a crank shaft, radius bars pivoted below the crank shaft and extending upward above the same, devices connecting said ra-



dious bars to said movable members, and connecting rods connecting said radius bars to the crank pins, whereby each said crank pin is carried around by the effective stroke of its movable part more than the half-circumference of its path, thereby carrying the other crank pin beyond its dead point in readiness for the next effective stroke of its movable part, substantially as described.

725,379. Muffler for Engines. Ralph P. Thompson, Springfield, Ohio. Filed Feb. 1, 1902. Serial No. 92,097. (No model.)

Claim—1. In a muffler, the combination of a receiver for the exhaust products, having an inlet thereinto and an outlet therefrom, with the inlet and outlet arranged in juxtaposition to operate and have the inflowing products retard the outflow until the pressure of the expanded products in the receiver reaches a point of equilibrium for the equilibrium of pressure to act and cause an outflow of the products, substantially as described.

725,394. Self-Propelling Vehicle. Augustus A. Ball, Jr. Lynn, Mass., assignor to Elihu Thomson, Swampscott, Mass. Filed June 5, 1902. Serial No. 110,317. (No model.)

Claim—1. In a vehicle, the combination of a body, a driven axle, and a motor which propels the vehicle and forms the sole distance bar or strut between the body and the axle.

725,457. Steering Check for Vehicles. Hermann Lemp, Lynn, Mass., assignor to Elihu Thomson, Swampscott, Mass. Filed June 16, 1902. Serial No. 111,924. (No model.)

Claim—1. In combination, a cylinder, a piston, valves mounted thereon, a shaft and a pivotally supported rocker arm actuated by the shaft for moving the valves.

725,477. Motion Checking Device. Otto F. Persson, Lynn, Mass., assignor to Elihu Thomson, Swampscott, Mass. Filed Sept. 29, 1902. Serial No. 125,211. (No model.)

Claim—1. In a motion checking device, the combination of a stationary support having a ringlike projection carried thereby, a movable support, dogs which are carried by the movable support and are arranged to grip the ring, a movable casing which incloses the dogs, and stops which are carried by the casing for disengaging the dogs.

725,556. Electric Igniter for Explosive Engines. George A. Goodson, Minneapolis, Minn. Filed March 17, 1902. Serial No. 98,465. (No model.)

Claim—1. The combination with an electric generator having a rotary member, of an engine driven impelling device moving

said member in a constant direction, means for giving said device a speed independent of the engine's speed, a trip for setting and releasing said means, and means for varying the time of action of the trip.

725,616. Power Drum for Vehicles. Charles E. Duryea, Reading, Pa. Filed May 17, 1902. Serial No. 107,767. (No model.)

Claim—1. A power transmitting device comprising a motor shaft, a gear on said shaft, revoluble power transmitting means operatively connected therewith, a sprocket wheel operatively connected with the revoluble means, a brake adapted to co-operate with said revoluble means to produce a certain speed, and pivoted means interposed between said sprocket wheel and said means and engaging the latter for varying the speed, substantially as described.

725,620. Antifriction Bearing. Albert E. Henderson, Toronto, Canada, assignor to Toronto Roller Bearing Company, Limited, Toronto, Canada. Filed Nov. 13, 1902. Serial No. 131,169. (No model.)

Claim—1. In a roller bearing, the combination of bearing elements, means for retaining the bearing elements in their relative positions, spacer carrying means connected to the retaining means, and adjustably mounted spacers for the bearing elements carried by said carrying means.

725,629. Transmission Gear for Motor Vehicles. Andrew L. Riker, Short Hills, N. J., assignor to the "Locomobile" Company of America, New York, N. Y., a Corporation of West Virginia. Filed July 16, 1902. Serial No. 115,842. (No model.)

Claim—1. In a transmission gear for automobiles, the combination of a driving member, a driven member, a driving gear for the former, a plurality of intermediate gears, including a reversing gear, and means, including a single shiftable element only, for driving said driven member through any one of said intermediate gears.

725,644. Electric Igniter for Explosive Engines. George A. Goodson, Providence, R. I. Filed Dec. 26, 1902. Serial No. 136,527. (No model.)

Claim—1. In an electric igniter for explosive engines, the combination with an electric generator having a crank on its movable member, of an engine driven part, a trip crank, a rod connecting said two cranks, and a tension device tending to hold said trip crank and rod on a dead centre and said rod at an angle to the generator crank, when in normal or idle position, with said named elements so disposed that the engine driven part will first force said trip crank and con-

nected parts away from their normal or idle position, against the yielding strain of said tension device, and then release the same, thereby permitting said tension device to restore said parts to their normal position and stop the same without jar or vibration, substantially as described.

#### Commutators on Dashboards.

Now that the practice of mounting a chain-driven commutator upon the dashboard has come somewhat into vogue, it should be remembered that a great deal of difficulty will be experienced in getting the chain correctly replaced if it is taken off for any purpose. Of course, where a spur gear is employed to drive the commutator, it is perfectly easy to mark one tooth and the bottom of the two opposite teeth into which it engages, thus insuring correct timing; but with a chain drive it is impossible to imply mark two teeth alone.

This may be done to a certain extent with satisfaction, however, by marking the rim of the wheel on the centre line; it then becomes a matter of the eye in replacing the chain, and also one of memory to insure the marks being in correct positions, i. e., both marks should be at the bottom or top of the wheel, as originally placed when they were indicated.

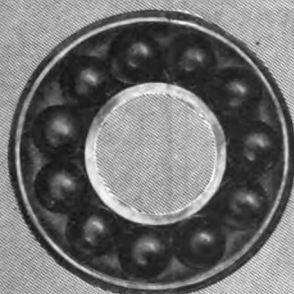
It is a good idea, too, to have pointers attached to convenient parts, the marks on the chain wheel being brought opposite to these. In any case, it will, of course, be necessary to ascertain, roughly, the relative position of the crankshaft to the camshaft. Unless this is done, it is quite possible to get the setting incorrect, as while one wheel may be in position correctly, the other may be a revolution before or behind it.

#### Jandorf Enlarges.

Louis Jandorf, who does a lively business in second hand automobiles of every variety at 1786 Broadway, as well as repair work, has taken on the agency for the Buffalo gasoline cars, and has just received a large shipment of runabouts and touring cars. The Jandorf place has been enlarged during the last week by the addition of a lot in the rear, 25 feet deep by 125 wide, which has been converted into a storage room and shop.

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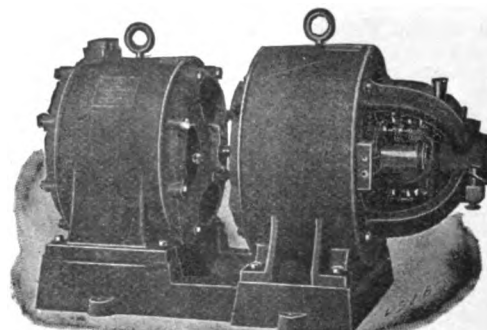


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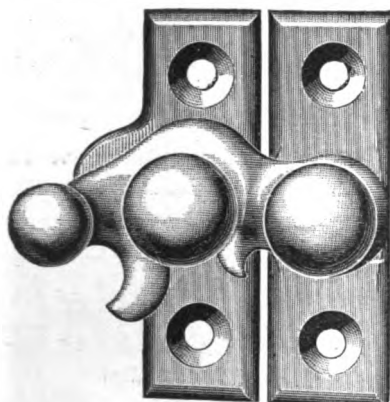
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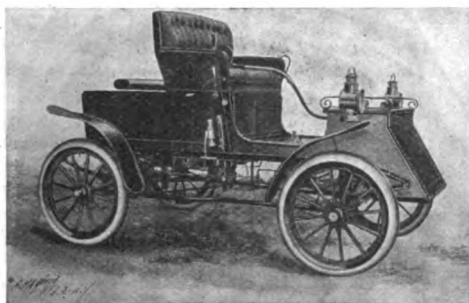
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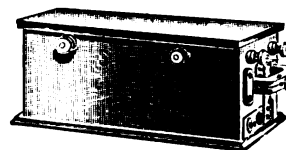
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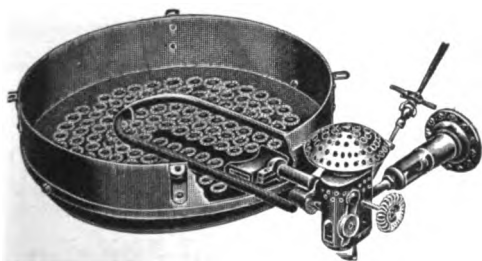
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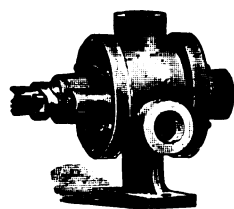


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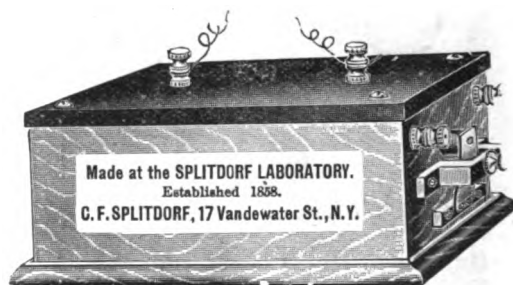
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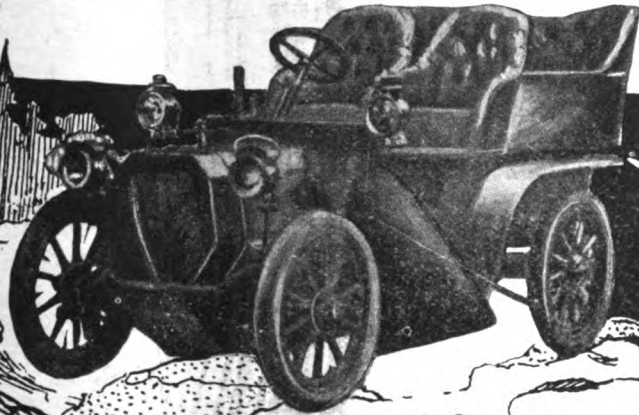
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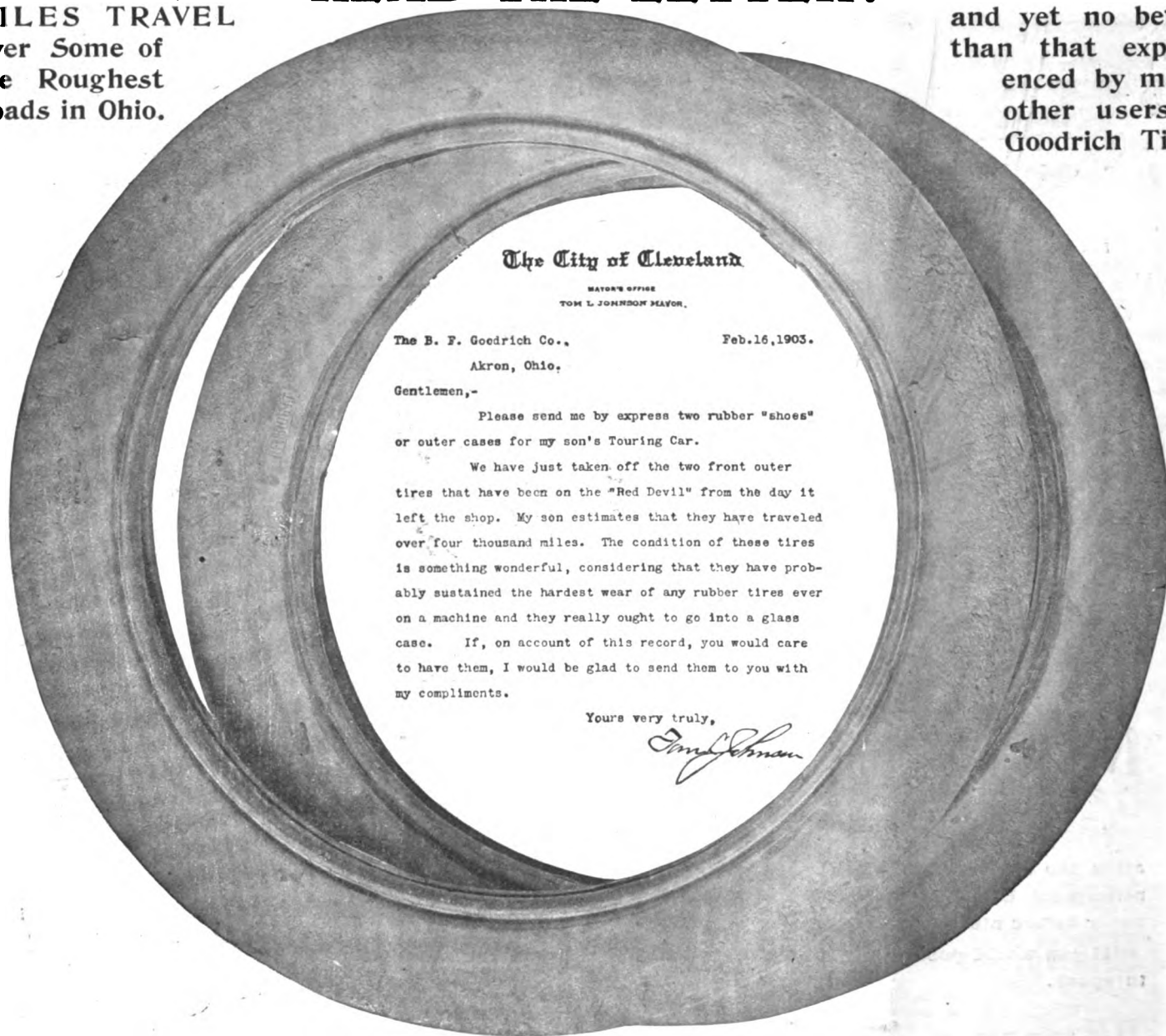
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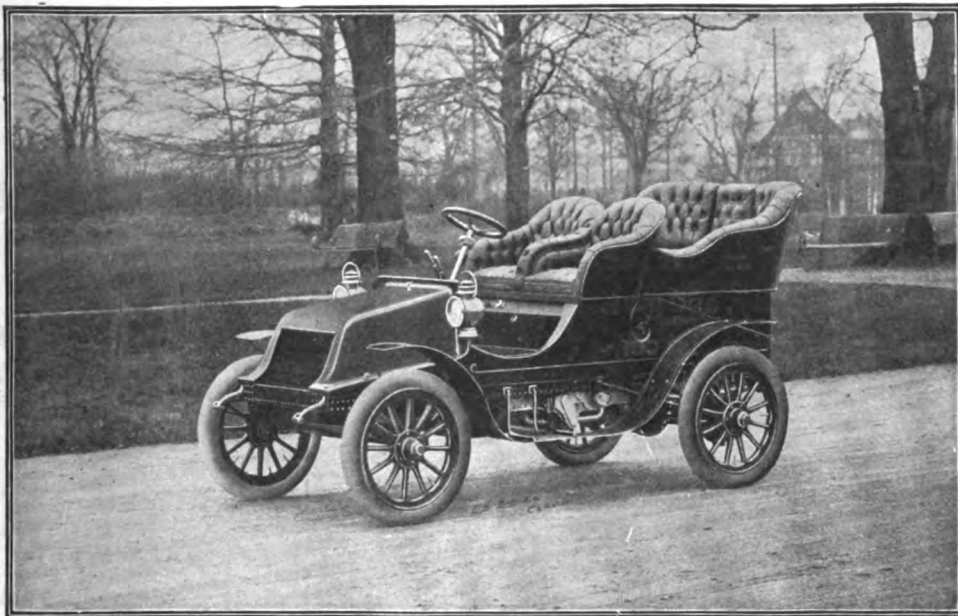


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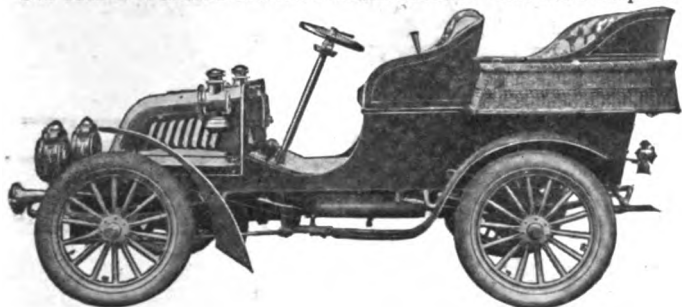
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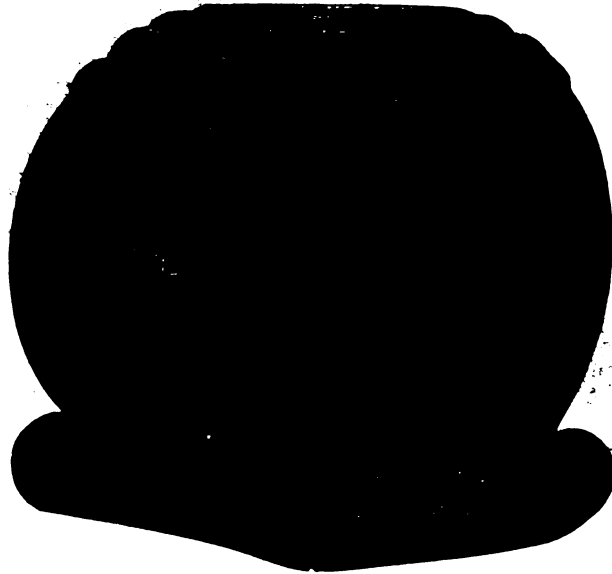
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*The Locomobile is the best automobile*

*Above is shown the 1903 Stanhope "B" (Steam), a desirable touring car.*  
**IMPROVEMENTS:** Enlarged boiler; indestructible water gauge; 10 H. P. engine, encased and using superheated steam four band brakes; Victor Steam Pumps. Write for full details. We also manufacture gasoline cars.  
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**The Locomobile Company's Executive Headquarters Removed to factory, Bridgeport, Conn.**  
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able to  
make a

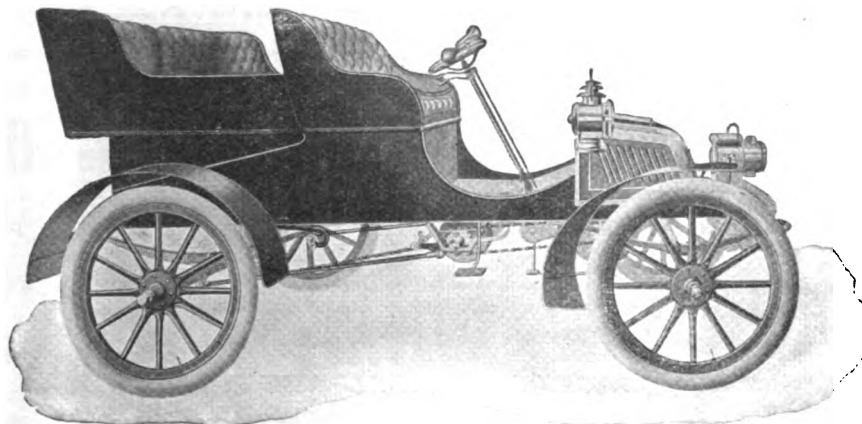
**MOTOR DO WITH  
TWO STROKES  
WHERE FOUR  
WERE BEFORE REQUIRED**

would seem akin  
to the benefactor  
who made

**TWO BLADES  
OF GRASS GROW  
WHERE BUT ONE  
CREW BEFORE.**

at any rate the **ELMORE MOTOR** is in that class  
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**\$800—ELMORE RUNABOUTS AND TOURING CARS—\$1400**



The vehicles themselves are like the motor—simple and as reliable as they are simple. They certainly merit your inquiry if simplicity and not complication appeals to you.

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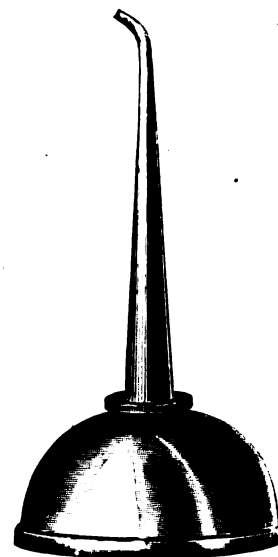
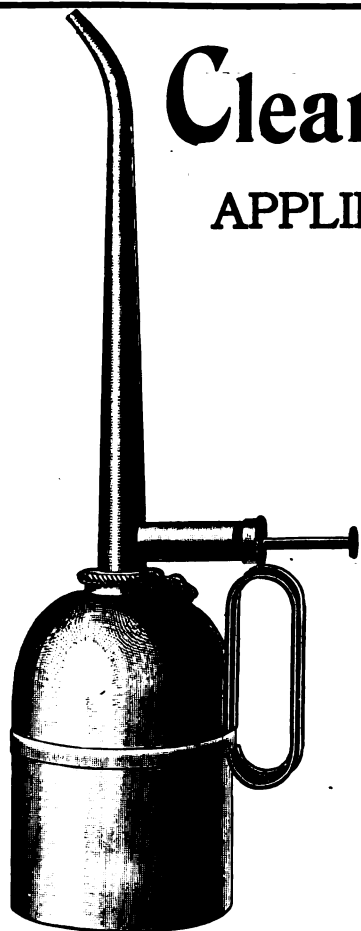
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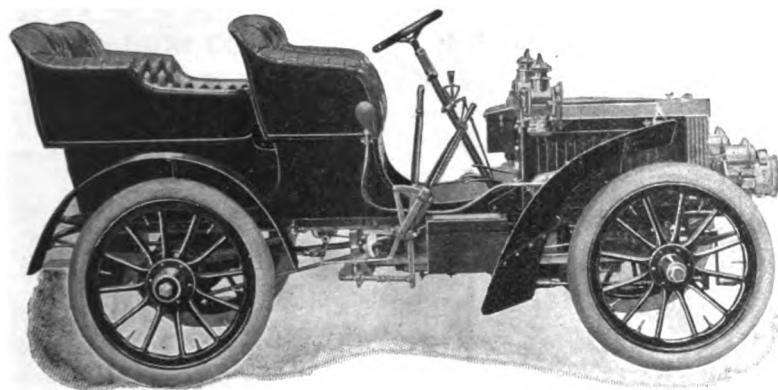
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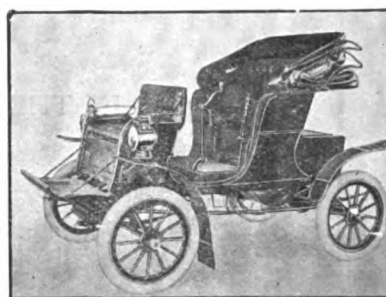
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And runs without Noise or Vibration.

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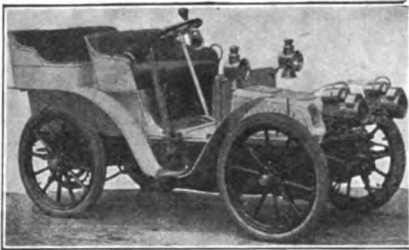
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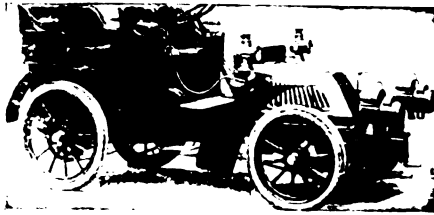
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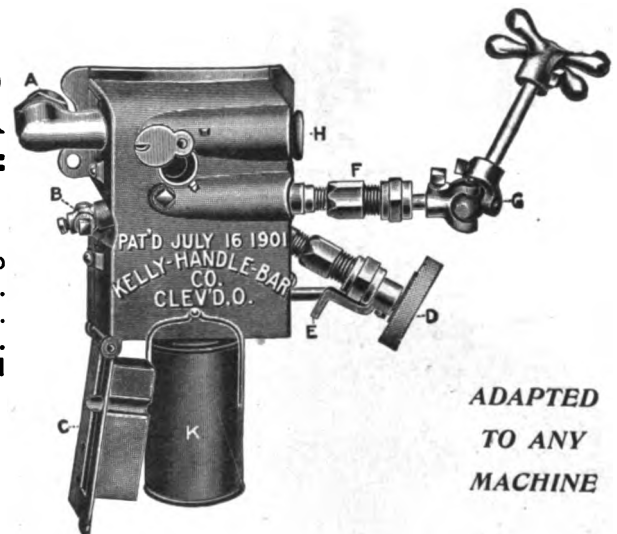
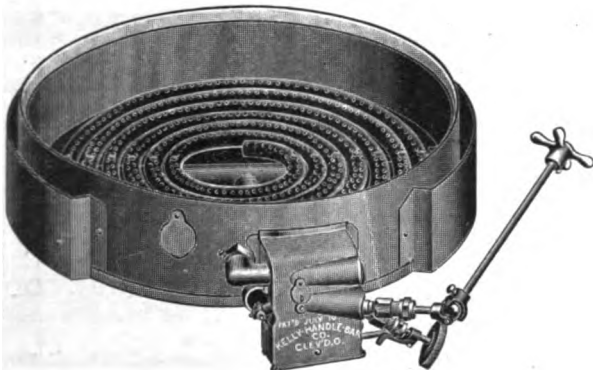
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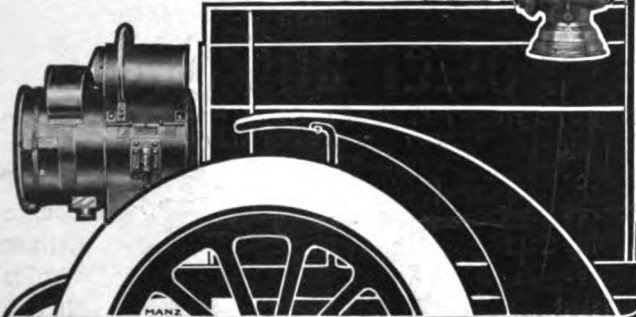
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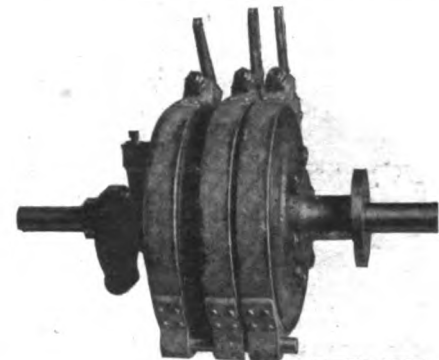
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It is possible to pay more than the

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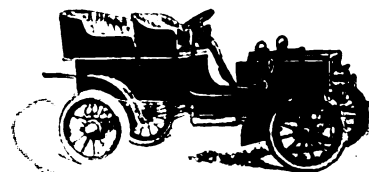
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*They also are as reliable as the finest workmanship by American mechanics can make them*

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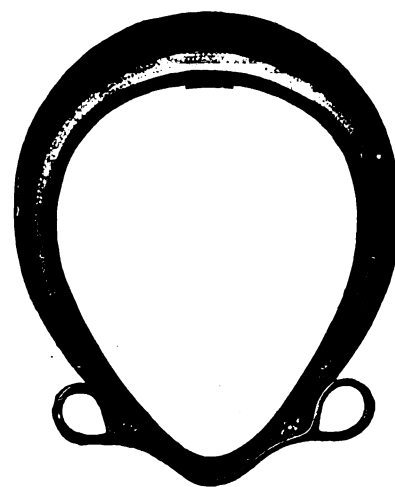
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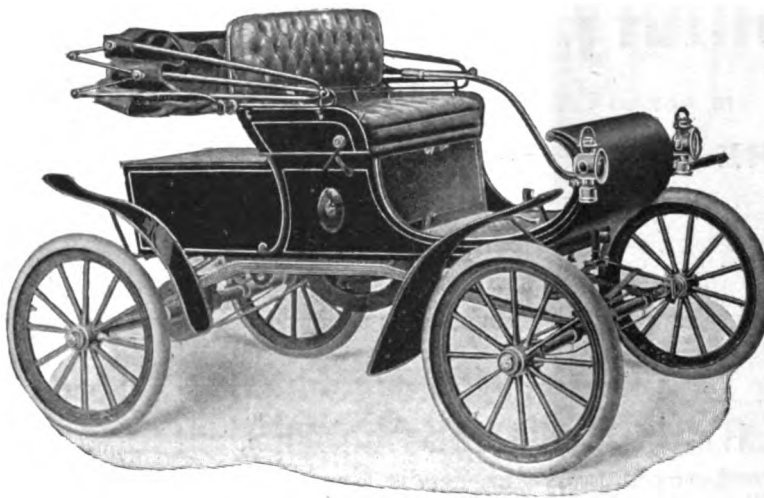
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HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingley & Co., Johannesburg and New York.  
AUSTRALIA—Knowles Automobile & Power Co., Ltd., Sydney.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
JAPAN—Bruhl Bros., Yokohama and New York.  
ASIA, MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, April 30, 1903.

No. 5

## NOW POPE'S PROPERTY

**Court Confirms Sale of International and Federal Companies—Call Issued for \$1,250,000.**

The International Motor Car Co. and the Federal Mfg. Co., assets of the late American Bicycle Co., are now the property of the Pope Mfg. Co. As was expected, Judge Kirkpatrick, of the United States Circuit Court, at Trenton, N. J., on Monday last confirmed the acceptance by the receivers of the Pope bid of \$3,500,000, and ordered

"That upon the surrender for cancellation of the receiver's certificates, heretofore issued by said receivers, to the amount of \$500,000, and upon the making of the cash payment of \$3,500,000 mentioned in said offer, the said receivers shall forthwith execute and deliver such bill or bills of sale and assignments as shall be requisite in law to convey and assign to said purchasers or their nominee said personal property according to the terms of said offer, and that in lieu of the payment by said purchasers of said cash sum of \$3,500,000 the said receivers shall accept from said committee an acknowledgment of the receipt of such dividends as the said purchasers as such committee shall be entitled to on a pro rata division of whatever is divisible to and among the creditors of the defendant company upon the completion of this transaction. In ascertaining the amount of such dividend, and in order that immediate delivery may be made of said bills of sale and assignments and of the possession of the property to be sold, said receivers shall provisionally fix and establish the amount of the debts proved to them with interest and adjudged as of August 30, 1903, where interest is payable."

The Court stipulated that

"Neither this order or decree nor anything done under it or in pursuance of it shall affect in any way the right of any creditor of the defendant company who is not represented by the purchasers as a reorganization committee to receive in cash his pro rata share of whatever may be finally ascertained by the Court to be divisible among the creditors of the said corporation, nor shall anything in this order contained be construed to adjudicate the validity of any claim or demand against said corporation which has not been admitted by the receivers, and all questions in respect to the validity of any such claim or demand are reserved for the further order of the Court. Nor shall anything in this order contained be construed as vitiating any contract heretofore made

by the American Bicycle Company, the defendant herein, with Canada Cycle and Motor Company, Limited, and any such contract, if not assumed by the purchasers under this sale shall remain of the same force and effect as if this sale had not been made."

The Pope bid was made in the name of the A. B. C. Reorganization Committee, William A. Reid, Frederic P. Olcott et al., and though the Pope Mfg. Co. is not fully organized, Colonel Albert A. Pope, who will be its president, is already in control, and to all intents and purposes the property has passed to the company which bears his name. The officers will be elected as soon as the legal technicalities which surround the transfer are completed.

The first move made has been to issue a call for payment of 50 per cent. of the Pope Co.'s new preferred stock of \$2,500,000. It is due in ten days, and as the stock was underwritten by Colonel Pope and the members of the Reorganization Committee, the company will at once have an available fund of \$1,250,000 for operating expenses.

## May Dispute Miles's Monopoly.

From remarks that have been let fall, it is quite evident that there are those in Chicago who are not content to believe that the Coliseum is the only building in that city in which a show can be held or that the manager of the previous affairs, S. A. Miles, is the only man competent to run one. Miles, it will be recalled, recently secured the exclusive privilege of the Coliseum for five years, but according to reports certain officials of the Chicago Automobile Club have secured an option on the Auditorium Theatre, and are now dickering or at any rate quietly flirting with certain officials of the National Association of Automobile Manufacturers with a view of obtaining the requisite sanction, despite the fact that President Budlong is an old Chicagoan with a Chicagoan's regard for Miles. How far the matter has progressed cannot be learned, but that the reports are not wholly empty is certain.

## Kirk Gets Selden License.

The Kirk Mfg. Co., Toledo, Ohio, makers of the Yale car, are now fullfledged members of the Association of Licensed Automobile Manufacturers. Their Selden license was issued this week.

## UPRISING

**New York at Last Aroused to Fight a Man's Fight for a Man's Right—Story of the Sudden and Remarkable Awakening**

Acting almost as if by concerted signal, the users of motor vehicles of New York State have turned to make a desperate fight against the making of the Bailey-Doughty bill a law. After being hunted through the statutes of the State year after year by laws successively more exasperating, the bill which has passed both houses of the legislature finds them at bay in the Executive Mansion at Albany, and now there is nothing but talk of fight to be heard. At last there are signs that they will no more run meek and affrighted before the hound of prejudice, but will spread the fight, take the aggressive and test the constitutionality of license laws and other restrictive enactments, and will also present a solid front politically to those legislators who may in any way menace their highway rights in future.

The uprising has been not only general, but sudden and violent also, as was inevitable when a policy of compromise and toleration had been pursued to its limits. In the general uprising some conventionalities, traditions and idols have been upset and smashed, and the ultimate consequences of the whole disturbance are not yet in sight.

Beginning with the positive stand taken by the Motor World for a finish fight on uncompromising lines as to the constitutionality of all licensing and restricting laws, there have been sporadic outbursts by individuals and organizations against the Bailey-Doughty bill, until at last even the members of the Automobile Club have been aroused to an uprising that threatens to quite overturn the established order of things in that organization and to result, perhaps, in a divided body and a new club.

This is one of the most startling results of the uprising against the bill indorsed by President A. R. Shattuck and the law committee of the club in the name of its mem-

bers. The agitation over this indorsement has fanned to a flame an opposition against the autocratic policy of the club and the domination of its management by the president, which is said to have been smouldering for some time past. It is not too much to say that there is open rebellion in the club against the position taken by the president, the law committee and the board of governors. A special meeting has been called for this Saturday night, at which it is hoped by vote of the members to repudiate the action of the president and law committee.

Until the position of the club is finally determined at the special meeting it stands conspicuous as the only automobile organization of any sort in the State that is not actively opposed to the signing of the bill by the Governor, in whose hands it now is. Last Thursday the National Association of Manufacturers put itself on record as being opposed to the bill, and the same night the newly formed New York Automobile Trade Association adopted a resolution denouncing the bill and directing that a committee be sent to Albany to urge a veto of it. On Friday the governors of the automobile club declared that its law committee had been right in approving the measure. On Saturday the six clubs in the upper part of the State united in a State federation and passed a resolution condemning the bill, the A. C. A. and its president. On Monday the rebellion in the club broke out, and on the same day the Governor, in response to many requests for a hearing on the bill, decided to hold one on Wednesday, May 6. There, in brief, the matter rests at the time of this writing.

Affairs in the Automobile Club of America began to focus themselves on last Friday night, when the governors held a special meeting to consider the action taken by the law committee of the club, led by President Shattuck, ex officio, in indorsing the now far famed bill. It was a remarkably well attended session, only three of the entire board being absent, and one of these three was detained by illness.

President Shattuck was there to preside, and the others present were Winthrop E. Scarritt, Jefferson Seligman, Dave H. Morris, Sidney Dillon Ripley, Ernesto G. Fabbri, James L. Breese, Colonel John Jacob Astor and Peter Cooper Hewitt.

Because Messrs Scarritt, Seligman, Hewitt and Astor had prior to the meeting been committed by interviews and published letters as being opposed to the bill, there was some doubt whether the outcome of the meeting would be a "whitewash" or not. The session of the governors began at 9 p. m., and while it was in progress half a dozen newspaper men cooled their heels in the outer office. Once, when a couple of them strayed into the general assembly room, from which the room of the governors was separated by closed doors, the newspaper men were reminded of the high minded character of the president of the club and of his regard for servants and newspaper men by one of the em-

ployes of the club, who went to a reporter who dared to be writing at the corner of a table across the room from the closed door, and told him that it was Mr. Shattuck's orders that no newspaper men should be allowed in that room while the governors were in session. There being no outhouse or cattle pen attached to the clubrooms for the accommodation of the reporters, they were allowed after that to wait in the cafe, where Mr. Shattuck could be sure they could not listen at the keyhole.

Three times during the session of three hours Mr. Shattuck left the meeting room and walked alone about the reception room. Whether this was because his resignation was being considered or his conduct being discussed could not be learned.

Whatever happened in the governors' room Mr. Shattuck finally won the battle, for it was decided to make the law committee the scapegoat and to "whitewash" it and the president by supporting its action. Then a long time was taken in framing a resolution to be given out for publication, and the result was a resolution which was handed to the reporters with the remark that there was no further information to be obtained than was contained in it. No explanation of what is meant by the "industry of automobilism" accompanied this curious resolution. Mr. Shattuck had the bearing of a man greatly relieved when the meeting was over. The resolution adopted was:

At a special meeting of the board of governors of the Automobile Club of America the Doughty-Bailey bill, which has been passed by both houses of the State legislature and is now in the hands of the Governor for signature, was thoroughly discussed and the following resolution adopted:

Whereas, The law committee of the club obtained certain important concessions favorable to the automobile (such as the repeal of the Cocks bill) in consideration of lending the support of the Automobile Club of America; therefore,

Resolved, That the bill was the best obtainable under existing circumstances; and, further

Resolved, That every effort be made another year to eliminate those clauses which appear at present to be objectionable to the rapidly growing industry of automobilism.

The news of this meeting was published in the papers on Saturday morning, and from that on the indignation of individual members began to rise.

On Sunday night eight or ten members met in the clubrooms and fell to discussing the situation. The fact that no one had thought it worth while to investigate the provisions of the bill while it was pending and check the action of the law committee was ignored. The propositions that the bill was injuring business and that President Shattuck was responsible for its passage, and that it was a "one man club," occupied the foreground. The members present were nearly all representatives of the trade. They waxed wrathful as they talked, and finally a call for a special meeting was determined upon, with the idea of prevailing upon the members to repudiate

the action of the law committee, president and governors.

The constitution requires a special meeting to be called at the request of fifteen members, and before Monday noon the following notice was posted on the bulletin board of the club:

Having been requested by fifteen active members of the club to call a special meeting of the club on May 2, 1903, to ascertain the sentiment of the members in regard to the Doughty-Bailey bill now in the hands of the Hon. Governor B. B. Odell, Jr., I hereby call a special meeting for the above purpose, to be held on May 2, 1903, at the clubhouse, No. 753 Fifth avenue, at 9 p. m.

ALBERT R. SHATTUCK,  
President.

No names were attached to this as it appeared on the bulletin board, but it was learned that those who signed the petition for the call were A. L. Riker, S. H. Valentine, Philip Van Volkenburgh, Allen Whiting, Percy Owen, W. N. Beach, Clarence M. Hamilton, Emerson Brooks, Harry L. McGee, A. R. Armstrong, George B. Adams, W. P. Kennedy, John Brisben Walker, F. M. Lande and O. J. Woodard.

Only fifteen signatures were obtained because that was all that were required. In order to gain time the handiest names were obtained, and so they were mostly those of persons interested in the trade.

On the subject of this move Percy Owen distinguished himself by being the most plain spoken, and thereby he slipped into the position of leader in the revolt. He declared emphatically that it was high time for the members to rise and put an end to the "one man rule" of the club and take part in the active management. He said the club should pass a vote of censure on the president and law committee, and thought it would be done. President Shattuck had acted, he said, without consulting the members, and had had pledged them when he had no right to do so.

In order to have the meeting as largely attended and as representative as possible, Owen and others interested busied themselves in getting out a letter to be sent to every member of the club, urging him to attend the meeting on Saturday night. For this letter some forty names were obtained to be appended. Owen said that some of the most prominent and influential men of the club had granted the use of their names for this letter and that the general sentiment was that the club was in an outrageous position and must vindicate itself by repudiating the action of its president and law committee.

President Budlong, of the National Association of Automobile Manufacturers, arrived in New York on Tuesday with a telegram from Governor Odell's secretary notifying him of the hearing to be held on May 6. He was emphatic in his denunciation of the bill and of the attitude taken by the club. He said that he had received word from various sources that sales were being

(Continued on page 181.)

## BORN WITHOUT A NAME

**New York Clubs Organize, Elect Officers, Condemn Bailey Bill but Select no Title.**

In response to a call issued by the Automobile Club of Syracuse, representatives from seven clubs met at the Yates House, Syracuse, N. Y., on Saturday night and effected a temporary organization of the proposed State league of clubs.

The delegates present were: Utica Automobile Club, A. J. Seaton, W. H. Birdsall, A. V. Brower and C. S. Mott; Buffalo Automobile Club, George S. Metcalf; Albany Automobile Club, C. M. Page and O. A. Quayle; Rochester Automobile Club, Frank Sager and J. J. Mandery; Auburn Automobile Club, Charles Shilling; Oneida Automobile Club, John Maxwell; Automobile Club of Syracuse, H. W. Smith, T. D. Wilkin, Willet R. Brown, C. A. Benjamin, A. B. Brown, Frederick H. Elliott and George S. Larrabee.

The meeting organized by the election of the following temporary officers: President, Dr. William E. Milbank, of Albany; first vice president, W. H. Hotchkiss, of Buffalo; second vice president, Harry S. Woodworth, of Rochester; third vice president, A. J. Seaton, of Utica; secretary and treasurer, Frederick H. Elliott, of Syracuse.

After an interchange of opinions it was decided to adjourn, to meet again on Wednesday afternoon of this week at 3 o'clock for the purpose of perfecting the organization and making it permanent. Attorneys will be present at that meeting to draw up a constitution and by-laws, and the name of the body will also be decided upon. The name talked of on Saturday was the New York State Association of Automobile Clubs.

A telegram was read from W. J. Morgan, of New York, congratulating the Syracuse club as the parent club of the State organization and stating that the mysterious New York Automobile Club will undoubtedly become a member of the State body when organized, which will be within thirty days.

That the delegates present were very much wrought up over the Bailey measure, which is now before the Governor awaiting its nature, was evidenced by the introduction and passage, without opposition, of the following resolution:

Whereas, It appears that the passage of this bill was facilitated by the personal indorsement of the bill by the president of the Automobile Club of America at Albany, which indorsement was subsequently ratified by a meeting of the governors of the club; be it, therefore,

Resolved, That it is our unanimous opinion that the bill in question is harmful in its provisions and would work untold injury to the automobile industry, without effecting the reforms it aims to bring about; that we deny and protest against the assumption implied in this measure, namely, that all automobilists are predisposed to break the law, and as such are the subject

of quasi-criminal legislation, such as this bill contemplates; that we protest against the assumption of the A. C. A. in accepting this bill in the name of the automobilists of the State as unwarranted; that we forward a petition to Governor Odell embodying such protest and urging him to exercise his veto power to prevent this bill becoming a law; that we urge upon individual members of our respective clubs the immediate necessity of using every legitimate effort to bring to the attention of the governor the true feelings of automobilists throughout the State in regard to this measure, in order that he may act advisably with the full knowledge of the facts when making his decision.

Further light is shed on the passage of this resolution by the fact that the Automobile Club of America was not among the clubs of this State to whom invitations to attend the meeting were sent.

It appears that last fall, when the movement to form the State league of clubs was first broached, the A. C. A. was invited to participate. It replied, stating that it was in full sympathy with the purposes of the proposed association, but that it thought it should be organized as a branch of the American Automobile Association. The inference, of course, was that the A. C. A. would not take part unless the headship of the A. A. A. was recognized. Whether or not it was because of this stand that the A. C. A. did not receive an invitation to attend Saturday's meeting is a matter of conjecture. But such was the fact.

The purpose of the new association is to bring about a more intimate association of the clubs of the State, with the object of influencing legislation, furthering the cause of good roads, etc.

### The Week's Incorporations.

Jersey City, N. J.—The Commercial Motor Co., under New Jersey laws, with \$250,000 capital.

Winnipeg, Man.—Joseph Maw & Co., with \$200,000 capital, to manufacture implements, bicycles and automobiles and harness and leather goods.

Buffalo, N. Y.—Duquesne Motor Car Co., under New York laws, with \$50,000 capital. Directors—A. H. Howe, H. G. Johnson and Leroy Pelletier, Buffalo.

Marletta, Ohio—Marletta Sporting Goods & Machine Co., with \$10,000 capital, to deal in hardware, bicycles, typewriters, automobiles, etc. Corporators—C. W. Race, R. E. Race, M. S. Race, G. W. Race and O. A. Lambert.

Yonkers, N. Y.—Howard Automobile Co., under New York laws, with \$10,000 capital; to manufacture vehicles of all kinds. Corporators—John J. Amory, Charles L. Seabury and William S. Howard, all of Morris Heights, New York City.

Rockaway, N. J.—Rockaway Automobile Co., under New Jersey laws, with \$250,000 capital; to manufacture automobiles. Corporators—Sidney Aronstein, No. 125 West Seventy-second street, New York; Henry D. Williams, No. 9 East 129th street, New York, and Robert Perkins, Rockaway, N. Y.

## PERCY OWEN, PRESIDENT

**The Cup-Lifter Honored by his Trade Associates and Promptly Gets Down to Work.**

The New York Automobile Trade Association has been formally launched, with Percy Owen at the helm, and one of the first two standing committees appointed was one to investigate the relations between chauffeurs and dealers, all of which was foreshadowed by the Motor World exclusively in its exposure of the chauffeur situation on March 12. It is interesting to note that the committee on chauffeurs, which will have to deal with the question of paying commissions to the operators of storage customers, consists of two men representing firms which are generally supposed by the trade to be supporting the commission system—in fact, whether believing in it or not, and one representative of a firm which has been and is a steadfast opponent of the practice. The president, as a member ex-officio of the committee, will represent another firm determinedly antagonistic to any compromise of the question.

The officers of the new local trade body were elected at a meeting of the executive committee held last Friday night at the Mobile headquarters in New York, No. 1,713 Broadway. Nine of the fifteen executive members were present. The full board of officers chosen was: Percy Owen, Winton Motor Carriage Co., president; George B. Adams, International Motor Carriage Co., first vice-president; Allen Whiting, Electric Vehicle Co., second vice-president; John F. Plummer, jr., Locomobile Co. of America, secretary and treasurer.

The committee on chauffeurs appointed was as follows: R. A. Greene, of John Wanamaker; C. R. Mabley, of Smith & Mabley, and Benjamin C. Barry, of Barry & Hayes. The following committee on membership was named: C. R. Mabley, R. M. Owen and Frank Eveland.

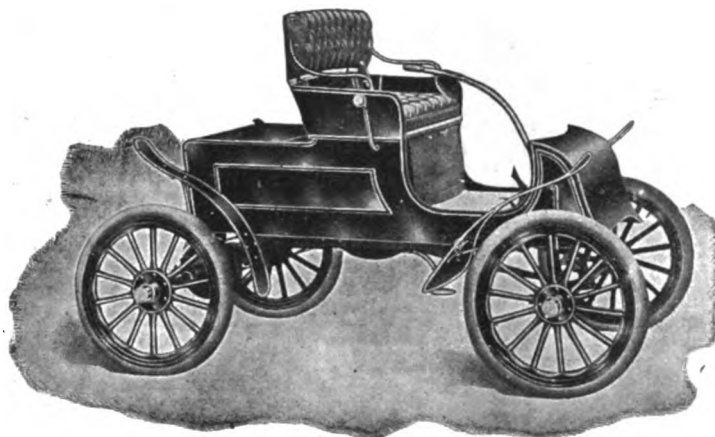
As a part of its first business proceedings the association adopted a resolution condemning the Bailey-Doughty automobile bill pending before Governor Odell in New York State as a measure that would be injurious to the interests of all engaged in the automobile business. The resolution required the secretary to forward a copy of it to the Governor, and called upon the president to appoint a committee to go to Albany and oppose the signing of the bill should the Governor grant a hearing on it.

### Some one may Some Day Oppose!

Reports of opposition that is forming to fight the Selden license are now circulating. They are nearly a month later in making their appearance than was expected. The Selden association was organized just about a month ago.



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NEW YORK, APRIL 30, 1903.

## Where the Real Battle Should be Fought.

It is time for men who believe that "concession is cowardly when right is on one's side" to throw their hats in the air.

The worm has turned. The stag is at bay. The automobilist is at last aroused, and with his back to the wall is fighting what the Motor World has so long urged him to fight, a man's fight for a man's right—the right "of every citizen to the equal and impartial use of the public highways, which their fathers dedicated or for which their taxes help to pay."

The awakening is in the nature of an eleventh hour awakening, and the battle is being waged only in New York State; but it is better than no awakening, and as it is so general, and the battle is so strenuous, that

much of the previous apathy can be forgiven.

The Doughty bill passed by the last legislature, and now requiring only the signature of the Governor to become a law, is the storm centre, and it is Governor Odell who is being besieged that he shall exercise his power of veto.

The local and the national trade associations, the automobile clubs and the individual automobilists are all bringing pressure to bear, and the while damning President Shattuck of the Automobile Club of America for his action in lending approval to the bill. The directors of the A. C. A. have "whitewashed" Mr. Shattuck, and not without reason. It was their apathy and the apathy of the trade and of automobilists generally that left him to make the fight alone, and he fought according to his lights. Shattuck is not a lovable individual, but the effort to make him the scapegoat is silly. It was not until two weeks after The Motor World printed the bill in full and by the plainest of speech and hardest of pounding that automobilists were induced to open their eyes and bestir themselves. Let the blame rest where it should, not on one man, but on all those who own or have to do with motor cars. They were not sufficiently interested in defending or conserving their God given right, either on this occasion or any other, to care much what sort of laws were being enacted. Shattuck simply followed the policy that has obtained with automobilists from the very beginning—the policy of cowardly concession. They have permitted Long Island vote raking "farmers" like Congressman Townsend Scudder and United States District Attorney Youngs—and these men, as we happen to know, are the real authors of the so-called Doughty-Bailey bill—to practically spit in their faces and rob them of inherited rights with remonstrance akin to that of the sucking dove.

If the Governor should veto the pending measure the now embattled automobilists will have another awakening. They will discover that the law at present in force, while

less rabid than that which is in the balance, is nothing to be proud of; it is far from preserving "the right of every citizen to the equal and impartial use of the public highways," and if the freshly aroused fighters stop short of obtaining that right they should count their fight but a drawn battle.

The defeat of the Scudder-Youngs bill—let us call it by its proper name—will prevent matters from being made worse, and, that accomplished, we fear that the present outburst of impassioned eleventh hour zeal will subside and count itself satisfied. We do not deery it—it is an inspiring change—but we do discount it. We ourselves are more deeply interested in the fight which is forming to test the legality of the existing one sided law in the Supreme Court of the United States.

Legislatures are made up of politicians, and politicians are not concerned with the legality of the laws which they enact; they pander to the hue and cry of the voting rabble; to them men's rights and public trusts are mere playthings. Automobilists will scare some of them by "going into politics," and thereby possibly obtain more favorable legislation. But what is wanted is not mere legislation, but a legal definition by the highest tribunal in the land of what constitutes one's rights to the use of the public highways—a definition that will stand forever and aye, to either defy and discomfit the Doughtys and Baileys and Scudders and all the other farmer loving (for electoral purposes only) politicians and cause their laws to crumble like dust, or that will settle for all time that men driving horses have paramount rights to which all others are subservient.

To strive for anything else is merely to temporize and to indulge in the "concession that is cowardly." For that reason therefore we urge that the aroused clubs, trade organizations and individuals, whether the present fight be won or lost, swing solidly and determinedly in line in the movement to test the constitutionality of such laws and to remain in line until the question is forever settled. To fight that the roads shall

be declared free to all men will be in the nature of a battle for independence that will be treasured by posterity and graven in the records of our country.

The iron is red hot and now is the time to strike. Strike hard! The present fight is merely a preliminary skirmish. The real battle is ahead. Let no man who deems himself a man dodge it.

### Electric Vehicle Popularity.

That the electric vehicle, both for pleasure and for commercial use, has increased noticeably in popularity during the last few months must be apparent to all who have had occasion to visit the larger centres or resorts, while in suburban New York, New Jersey and Connecticut and the other New England States, wherever good roads abound, the increased number of electric charging stations tells a story more sufficient than mere words.

These results can scarcely prove in the nature of a surprise. The enlarged and enlarging recognition of the electric is logical. Its cleanliness, quiet and lack of odor, its instant and ever readiness, its weather proofness, and the fact that mechanical knowledge is not necessary to its operation, are factors that weigh with great numbers of persons, and that are not to be minimized. The influence and competition of the great Westinghouse and General Electric companies and of the several storage battery concerns have been of distinct benefit also, and alike served both the trade and the public.

The manufacture of electric vehicles is also particularly satisfying. Not only has it given the public the greatest latitude in selection of models, both for pleasure and business, but it has been in the hands of a few substantial companies, producing satisfactory goods, and has been singularly free from the attentions of the "promoter" and others of the bubble blowing and get rich quick ilk.

It is small wonder that the "electric people" are wonderfully well satisfied.

### Silence That is Golden.

Times have changed very much since French motorists naively admitted that they like noise, that the more their motors "teuf-teufed" the better they were pleased. In the interim we have become particular. We have no serious objection to the soft, regular

"chug-chug" of the exhaust, for it assures us that all is well with the power plant. But at anything much more than this we draw the line, and very properly.

The ideal car of the future will be a noiseless one, or one so nearly so as to amount to practically the same thing. And this "sweet silence" will have reference not to the exhaust alone. The grinding of the gears, the rattle of springs, rods and braces, the staccatolike sound of escaping steam—all will have been eliminated and perhaps forgotten. In the process of elimination a marked improvement in other respects will have taken place and an infinitely superior vehicle will have been evolved.

It need scarcely be said that the reduction of noise—it can never quite disappear—is a work well worth the while of any maker. Noise is waste, economists have declared, and their dictum is accepted without hesitation. The waste may not be of power, although frequently it will be this, too. But effort is required to produce noise, and it can be expended in much better ways than this.

Silence is not only golden, but economical as well. Therefore the production of noise-lacking automobiles is a task worthy of the best makers.

### Value of Road Tests.

The practice of running new cars from factories to nearby cities under their own power is on the increase. It is one that possesses a number of advantages, one of the least of them being its economy. In fact, it is in some cases no more costly to ship by freight.

An economy of time is always made, however. Two days is usually consumed by the railroad companies, even when the factory and the city that is the point of shipment are separated by not more than 100 or 150 miles. When the distances are greater the time is correspondingly lengthened. Express shipments effect a considerable saving, of course, but the cost is so much greater that this mode of shipment is resorted to only when time is of paramount importance, as in the case of the Bennett Cup race cars, which were rushed through from Cleveland in less than two days.

The chief consideration weighing with those responsible for the running of cars under their own power is the thoroughly practical road test that is thus obtained.

Sometimes the purchasers of the cars suggest this course. They know that it will re-

veal the weak points and imperfections, if there are any, better than any short trials. Furthermore, it is a good sign when a maker or a dealer is willing to submit a brand new car to such a test. They must have confidence both in the car and in the system of inspection, and feel sure that even the pardonable troubles incident to the shaking down of new and untried machinery will not be of a nature serious enough to entail a breakdown. Little things that can be put to rights at the roadside with only a trifling loss of time need not count against the car. They are more apt to leave it in better condition, as they remove the likelihood of future trouble.

When a car has had a trial run of this kind, and has then been gone over thoroughly, adjusted, cleaned and lubricated, it is in excellent shape to be delivered to its new owner.

In case Vice-President Scarritt presides at the special meeting of the A. C. A. on Saturday, and finds occasion to refer to that "model law" which he helped mould for New Jersey, we sincerely trust that he will not fail to provide the "key" which usually goes with models, whether exhibited within or without glass cases. He might make clear, for instance, the fine justice that permits the Bowery bum in a horse drawn conveyance, or the Hester street pushcart peddler, to enter his beloved State unnumbered and without charge, while the reputable and self-respecting New York merchant in a motor car is denied admission until he has paid for the sacred privilege and pasted a label on himself.

It is timely to ask, What has become of those long looked for and much desired racing rules? The racing season is almost at hand, and it is not pleasant to contemplate again running under the antiquated and un-American makeshift that was handed over to the A. A. A. by the A. C. A. The race committee of the former organization was strengthened last winter largely with the promised revision of the racing rules in view. They were revised, we were told, and ready to present to the A. A. A. for approval. Their publication is highly desirable at this juncture.

Family carryalls—cars accommodating two to six persons—make a very desirable class of vehicles, combining, as they do, the good points of the runabout and the tonneau.

## UPRISING

(Continued from page 180.)

checked and orders countermanded because persons were afraid the bill would so restrict them as to rob automobiling of all its pleasures. When asked the question he said he thought the terrors of the bill had been greatly exaggerated, although it is a bad bill unquestionably. The N. A. A. M., he said, would send a delegation to the hearing before the Governor and would retain eminent counsel, a man of national repute and a friend of Governor Odell, to represent the cause of the manufacturers. This counsel is understood to be former Governor Frank Black. This question was put to President Budlong:

"In case the members of the Automobile Club do not reverse its position by overruling the action of its law committee, do you think it would then be a good organization for men interested in the trade to support?"

He replied: "That is a leading question, but I should say not. I am not a member of the club and do not care to criticise it."

Certain members of the Automobile Club who support Mr. Shattuck and the law committee had criticised the N. A. A. M. for acting at a late day, when its counsel, W. W. Niles, was a member of the law committee. With regard to this Mr. Budlong explained that Mr. Niles is not regularly retained by an annual fee to represent the N. A. A. M., and does not represent it unless specifically requested to do so, and was not in any way a representative of the N. A. M. with respect to the Bailey bill.

On the conservative side, that in favor of the bill and in favor of the club supporting the action of its president and law committee, not a great deal has been said. Those on this side seem to be waiting until Saturday night to declare themselves, and it may be that the confidence of the rebellious element will then be shocked by finding more opposition to the policy of repudiation than they have anticipated.

The most cheering news developed out of the situation is that certain members of the club are now preparing for a legal fight to test in the Supreme Court the constitutionality of all the laws requiring the licensing and tagging of automobiles, and that a constitutional lawyer of national reputation has been retained who is now investigating the Interstate Commerce law, with a view of ascertaining whether laws of several States that require highway users in automobiles to take out a new license before crossing the State line will not be in conflict.

It was George F. Chamberlin of the club who first made this known, and he is one who best expresses what sentiment has been heard in favor of the bill and of the law committee and President Shattuck. Mr. Chamberlin, who formerly was on the law committee, and is now a member of the Board of Governors, declares frankly that he believes the Bailey-Doughty bill to be an improvement on the existing law, and that

he will write to the Governor asking him to sign it. He says that the Cocks law is a bad one and that the new one, which repeals the Cocks law, is not quite so bad. When asked to specify the respects in which the Bailey-Doughty law will be a gain Mr. Chamberlin said:

"In the first place it gives us unlimited speed in the open country. Many have overlooked that. It simply says that the county officials shall not fix a lower rate of speed than twenty miles an hour on the open country roads. If they do not especially enact such a provision, there will be no limit. Another point is that the much objected to feature of requiring towns to put up a signboard half a mile from a postoffice, in order to make valid a speed restriction to eight miles an hour, practically compels the country authorities to advertise their timing traps. They have got to set their traps within the limits where eight miles an hour is required, and when you reach those limits there must be a signboard. Perhaps the most important gain is the explicit repeal of the provision of the Cocks law under which eight miles an hour is the limit in all incorporated villages. Three men can call a meeting to incorporate a village, and it is possible under that law for the farmers to lay out incorporated villages in such proximity as to form a network which would extend over a whole countryside and restrict the speed to eight miles an hour over a large rural territory. With regard to passing horse drawn carriages at eight miles an hour: The bill is very badly worded and while the grammatical construction of it makes it appear that you must not be going faster than eight miles an hour when you pass a wagon, the intent, I think, is that you must not be going more than eight miles faster than the other vehicle. At any rate the rate of speed must be proven in court, and there is no way one could prove an automobile's rate of speed at the exact moment of its passing a wagon unless there was a constable to keep time on every vehicle. The fuss about the provision for passing domestic animals slowly is merely captious criticism catching at trivialities. The courts will interpret and check any unreasonable proceedings on the part of the country officials. In contrast with the law that it was proposed to enact, the one now pending is lenient."

It was called to the attention of Mr. Chamberlin that what he considered "trivialities" were points that would afford the prejudiced country officials to set traps and arrest men, and that it was little satisfaction to be discharged after having passed a night in a cell or to learn a year later that your arrest, imprisonment and fining were illegal. Mr. Chamberlin stuck to his defense of the bill and he still supported it after it was suggested that on the plea that it was lenient by comparison, the yokel legislators might impose all sorts of indignities by threatening something worse and having them accepted in compromise, as were the provisions for this bill. The countrymen might, for in-

stance, draw a bill imposing a license of \$500 in every county and providing that the automobilist must wear a suit having prison stripes and bells on his cap, and if the automobilists could get a compromise so that they had to pay only \$250 in each county and need not wear the bells but only the stripes, they should think they had achieved a great thing and be tickled to death to advocate the modified law. To this Mr. Chamberlin seriously objected as not being a fair presentation of the matter.

Mr. Chamberlin was asked whether there was any law which might be construed as favoring the horse in the right of way on the road. He said emphatically no, and referred to the famous decision of Justice Cooley in Michigan, who said that the horse has no paramount right to the road. He was asked about the right of a policeman or constable to stop any man in an automobile at his pleasure and require him to show his license. He answered that he is uncompromisingly opposed to all forms of license or tax and tagging, and believes them to be unconstitutional, but supposing a license to be legal, it is probably with the police powers to stop a man and compel him to show his license. Another question put to Mr. Chamberlin was whether one class of men could be legally singled out to pay a heavier penalty than another for the same offense, such as the violation of the speed law. He replied that it is probably within the power of the Legislature to enact a law that would so apply.

### "I'm to Blame," Says Judge Church.

It was not until Wednesday afternoon, after all the foregoing had been printed, that The Motor World man succeeded in getting an interview with James C. Church, of the Law Committee of the Automobile Club, and from him some very interesting statements were obtained which shed much light on the whole subject.

In the first place, Judge Church was asked about the proposed test of the constitutionality of licensing and numbering. He said that it had been suggested at a meeting of the governors that if the present bill became a law a test of that question should be made. No test can be made, however, until the law is in effect, and then one undoubtedly will be made, he said.

Regarding this feature, Judge Church says that he has always maintained it to be unconstitutional to require automobiles to have licenses and carry numbers, or to carry initials. He has always used his car without initials on it, and both at Albany and in the city he has declared in words that he would not comply with the law, and invited arrest in order to make a test case.

With regard to the Bailey bill and the situation in the club, Judge Church said, substantially:

"The members have been hasty, and if they carry out their designs in repudiating the action of the Law Committee and the president, they will ruin the club. No man could

be accredited to represent it thereafter without being looked upon askance, and the doubt raised as to whether his action might not be repudiated later. We entered upon the compromises in the bill with the Long Island Protective Association in good faith, and if the club now backs out we will be branded as skulkers. Suppose the Long Island crowd had waited until some time when we were not present and gone back on their agreement and fought against the provisions we had agreed upon. What would be said of them? It is not generally understood what this law will be like in operation. It is the best automobile law on God's green footstool. There is not a provision of it excepting the compulsory imprisonment on third conviction that is not a concession to automobilists. In operation there will be very few convictions under it. I am the man to be cracked and not Shattuck, for I wrote most of the compromise clauses, and I initialed the bill. When, just before the bill came to a reading, we called a meeting of the Law Committee, we could not get the committee together. It was impossible to consult the members. We had to act ourselves and do the best we could."

Judge Church explained in detail about the framing of the bill and how it will operate, and any one hearing him and understanding matters will be apt to modify his views.

#### Parade as a Protest.

Last Friday it was announced that the runs and tours committee of the Automobile Club of America would hold a parade through the streets of New York on May 1. That was before the governors had met and voted to support the president and law committee in the indorsement of the Bailey bill. It was generally accepted that the idea of holding a parade on such short notice was to make a demonstration of the strength of automobilists as a sort of protest against the oppressive measure pending at Albany. On Saturday, after the governors had met, it was said the parade had been called off. Monday Secretary Butler said that while the run had been postponed, there was talk by the committee of going ahead with it. Outside the club rooms it was learned that letters had been sent to the members of the committee on runs and tours, instructing them to call off the parade, but that some of the committee were in a mood of insubordination and wanted to go ahead, in spite of the orders from "higher up."

On Tuesday it was announced positively at the club that the parade was off indefinitely. The same day President Owen of the N. Y. Trade Association said that he would begin work at once for the holding of a parade on May 4. The executive committee of the Trade Association does not meet until Friday night, but President Owen thought that with the concurrence of a majority of that body plans could be pushed forward, without waiting for the formal action of the committee, which could be pressured.

The idea is to hold a pageant open to all and endeavor to make it as strong, numerically, as possible.

## "AFTER" THE POLICE

### New York Automobilists to Face About and Prosecute Their Persecutors—The Programme.

New York city at the present time has no valid ordinance regulating the speed of automobiles in the streets of the city. When Greater New York was formed there was in operation section 371 of the revised ordinances, adopted March 9, 1897, which requires that horse drawn carts and wagons "and all other vehicles" shall not exceed a speed of five miles an hour in the city limits. The charter of the greater city empowered the municipal authorities to enact ordinances regulating traffic, but since the grant of the charter no such ordinances have been passed. A new set of "rules of the road" have been pending for a couple of years, but have not yet been passed.

The charter of the city which confers the power of adopting new ordinances stipulated further that the ordinances in force at the time of the consolidation shall be operative until superseded by later enactments.

As no ordinance amending the rules of the road has been adopted since the formation of the greater city, the traffic of the metropolis is still subject to the regulations contained in the revised ordinances of 1897, and these limit the speed of all vehicles to five miles an hour in the city. That this ordinance is still operative was recently declared from the bench, when a city justice, in disposing of a case remarked: "It is not generally known, but the legal limit of speed for horses in this city is six miles an hour."

With this as the situation almost every driver of a horse drawn vehicle in the city could be arrested and punished for exceeding the speed limit.

Now for the position of the automobilists under these anomalous conditions.

The Doughty bill, passed April 25, 1901, which is still in effect, says that no ordinance or rule adopted by any municipality shall restrict motor cars to a rate of speed lower than that of eight miles an hour. This being a State statute, passed subsequent to the enactment of the city ordinance, effectively nullifies it so far as the limit of five miles an hour for motor cars is concerned, while leaving the clause with regard to horses operative. The Cocks law of last year, however, provides for a limit of eight miles an hour for automobiles in all cities, and this might be construed as applying, if the court holds that it supersedes the Doughty bill. If the Bailey bill now pending becomes a law, however, the Cocks bill will thereby be repealed and there will then be no limit in New York City, for the new bill, like the original Doughty law, fixes no limit, but simply prohibits the local authori-

ties from fixing a limit lower than eight miles an hour.

This presentation of the situation is the result of the investigations of an able lawyer, and, as will be seen, the question as to the legality of the recent arrests in the city is a very pertinent one.

All of these facts have been studied by President Percy Owen of the N. Y. Trade Association, and the result is likely to be some merry times on Fifth avenue and other highways in the near future. The situation is to be laid before the association at its meeting to-morrow night for action.

Various moves have been conceived, and it is not unlikely that several of them will be made. One of these is to stop the discrimination against motor vehicles on the part of the police by having a committee go out and insist upon the arrest of horsemen who exceed the legal rate of speed. As this would probably render the Police Commissioner, judges and all sorts of prominent citizens liable to arrest, it is likely that the crusade against automobiles would be quickly ended.

Other plans are to proceed legally in two different directions, one that of enjoining the police on the grounds of oppression, and the other that of testing the law under which arrests are made and ascertaining their legal standing.

Still another idea suggested is that of arousing public sentiment to the ridiculous laws that are being invidiously enforced by having a motor car parade the streets at exactly eight miles an hour, bearing signs such as:

"This car is going at just eight miles an hour. Watch every one pass us. They are breaking the law; we are not." And

"How would you like to be the automobilist?"

"We are trying to catch a train without breaking the law."

Whatever is decided upon, it is certain that there is plenty of aggravation for action and plenty for opportunity right now of stopping such outrageous and un-American persecution.

It is generally understood that the present crusade by the police is the result of Street Cleaning Commissioner Woodbury's experience. He was arrested for exceeding the speed limit and escaped punishment by saying that he was going fast just to test the efficiency of the police force by seeing how many men would let him pass. He continued the story and reported to Police Commissioner Greene that the police were very lax. No other automobilist arrested has been released on the plea that he was out to test the efficiency of the force. They have not tried it.

Another interesting fact in connection with this persecution in the city is that a certain officer of the West End Association is creditably reported as having said that this organization will ultimately drive every automobile out of New York City—that the West End Association has sufficient money and is bent upon achieving this.



## THE MOST POWERFUL CAR

Monster of 120 h. p. Produced in Paris—What it is Like and its Effect on Foreign Races.

French Bureau Motor World.

2 Rue d'Abbeville.

Paris, April 17.—The tragic death of Count Zborowski in La Turbie hill climb is one of those incidents which may effect the whole future of automobile racing by awakening the authorities to an exaggerated

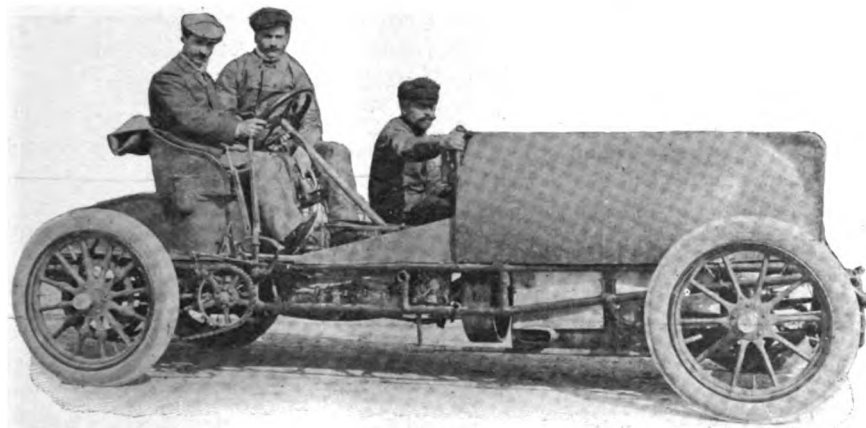
because he attempted to take a corner at right angles at the rate of sixty miles an hour. With a little care the danger would have been avoided, but still, when everything depends upon the judgment of the drivers in estimating the speed at which they may safely take the corners, it is certain that the danger exists, and it is for this reason that there will probably be no more racing on La Turbie Mountain. The gradient is not sufficiently steep for the powerful machines.

Another thing which will no doubt serve

vehicle in a race unless he has had it constantly in hand for some months.

The Mors, Peugeot and other monsters reported to have engines of 100 horsepower are still being kept in the background, and will probably not be seen before the Paris-Madrid race, but Gobron-Brillié created a sensation by sending down to Nice their new 120 horsepower car, which is certainly the most remarkable vehicle ever turned out of an automobile factory. The firm cannot be said to have followed any existing practice in the designing of their car, for they have made it a point of being as original as possible, even to the extent of constructing a tubular frame, and this, too, with a wheel base of more than thirteen feet and having bolted to it an engine of such huge power. If the tubes can successfully stand these enormous strains other makers can very well ask themselves whether they have not made a mistake in so completely abandoning this form of frame construction.

The design of the Gobron-Brillié engine naturally follows its usual lines, with two cylinders and four pistons, between which the gases explode, the upper pistons being joined by cross pieces at the end of which are vertical rods connected with the lower crankshaft. But in other respects the construction is entirely changed. The standard makes are all fitted with positive carbureters, which feed the gasoline into the mixing chamber by spoon shaped distributors actuated by a ratchet gear, each introducing



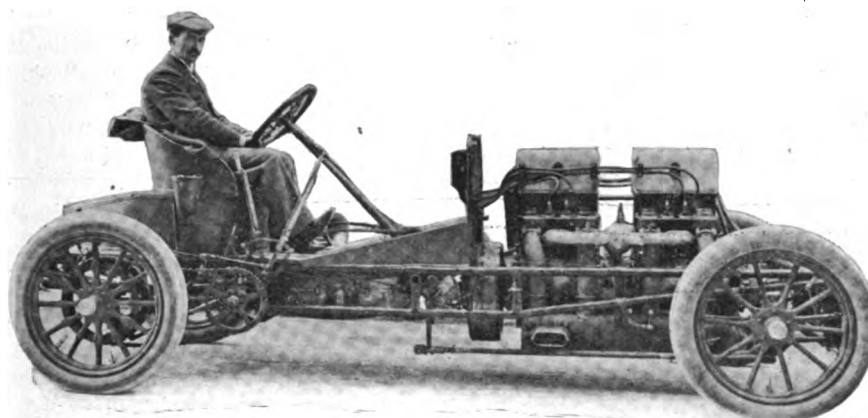
GOBRON-BRILLIÉ 120 H. P. CAR.

sense of their responsibilities, and it has long been clear that it would need very little to influence them in the direction of an almost wholesale interdiction of speed contests.

They have wavered on the borders of suppression and partial toleration because they were unable to make up their minds whether racing was necessary for the development of the industry or not, but finally, on the strength of repeated assurances from the trade that speed tests were a great factor in industrial evolution, and could be carried out with little or no danger to the competitors or the public, certain of the events were authorized, and it was therefore very desirable for the interests of the sport that nothing should happen to destroy the more encouraging attitude which the Government had adopted toward automobile racing.

If the authorities will look upon La Turbie accident in its true light it is probable that not much harm will be done. The catastrophe was due to a gigantic mistake. It was a mistake to run cars of such high powers on a long gradient which is of quite an ordinary character but presents great difficulties on account of the numerous sharp turnings, and it was a mistake on the part of Count Zborowski to drive as he did with the fixed determination of taking every possible risk for the sake of getting to the top in the shortest possible time. He did not take the most ordinary precaution, but drove just as if he had a straight, clear road before him. It cannot in fairness be said that the life of the Count was sacrificed to the dangers of automobile racing

to narrow down racing is the rivalry among manufacturers to build vehicles with engines of the highest possible power and capable of travelling at such speeds that



GOBRON-BRILLIÉ CAR WITH BONNET DETACHED.

the limit will depend upon the ability of the man to steer the cars and keep them under control. Driving vehicles of a year ago was mere child's play compared with the piloting of the monsters which are being prepared for the Paris-Madrid race and the Gordon Bennett Cup competition. The engines range from 90 to 120 horsepower, and the cars will be geared to travel at something like ninety miles an hour, but, of course, this speed will never be reached except, it may be, for very short periods under exceptionally favorable conditions, though as the reserve of power is at the command of the driver he has to exercise the greatest possible prudence in utilizing it. A man does not dare to drive such a

ing the exact quantity necessary for the cylinder charge, but in the new racing machines this is replaced by a constant level carburetter with throttling valve in the pipe leading to the induction valves. The carburetter and pipe are jacketed with warm water from the motor. The engine is a huge thing, well set down, and having a length of something like four feet. It is covered by an aluminum bonnet in the shape of half an upturned boat. It has been found necessary to have a special form of clutch to allow of the engine being introduced gradually to its load.

This car has not yet been tested for speed, and the makers themselves do not know what it is capable of doing. But at

Nice Rigolly had it under perfect control and drove it as easily as an ordinary car at any variation of speed. It will be extremely interesting to see what it will do in the forthcoming races.

The Daimler Motor Co., of Cannstatt, had a walkover at Nice, and after beating the La Turbie record with the only three vehicles that reached the top, they carried everything before them on the Promenade des Anglais, except the Henri de Rothschild Cup, which was won by Serpollet on his steam car. This, too, they accomplished with the new 60 horsepower cars, of which they had eleven competing. The abstention of the 90 horsepower Mercedes was a disappointment, as it would have been very interesting to watch their performances, and if the big cars are anything like thirty per cent. faster than those at Nice they will have a first rate chance of winning the Gordon Bennett Cup. There are many interesting features in the new Mercedes, most of which have already been made public, but little is probably known about the method of operating the inlet valves on the tops of the cylinders. The valves of each pair of cylinders are covered by a large collector forming an extension of the induction pipe, and through the top of this collector project the stems of the valves, which are operated by horizontal tappets set diagonally. The opposite end of each tappet has a connection internally threaded to receive the vertical rod from the half time shaft, and the rod is made to revolve in this connection by a rack and pinion when a variable lift is given to the valve tappet. All the valve gear is on one side of the engine and the ignition gear on the other, and everything on the motor is very accessible.

One of the greatest factors in racing machines is air resistance, which is much more considerable than is generally supposed with cars travelling at a very high rate of speed, and it has long been a problem among French makers how to offer the least possible surface to this resistance instead of overcoming it by increasing the engine power. For this reason many of the French racing cars are being fitted with special bodies. The only one, however, designed on scientific lines is the Serpollet car. This has the same 40 nominal horsepower frame of the type exhibited at the Paris Salon, and the engine is said to be capable of developing as much as 200 horsepower for a short period. It was expected to do something sensational in the flying kilometre at Nice for the Henri de Rothschild Cup, but owing to the previous accident on La Turbie, and a desire to take no risk at a moment when everything depended on the meeting being carried through without incident, M. Serpollet did not utilize anything like the maximum power. The feature of the body is the curved sides from a rakish bow and an inclined plane from front to back, so that no resistance whatever is offered behind the prow. It would

be difficult to improve upon this design for a car travelling at a very high rate of speed.

The Mors cars also made their appearance for the first time with bodies of the conventional inverted boat shape, but the chassis was of the Paris-Vienna type, with the engines modified to develop 65 horsepower, and the new machines will probably not be seen until their appearance in the Paris-Madrid race next month.

With the huge powers put into the new racing machines the question arises whether they will be able to show up satisfactorily on any but the best roads, and it is this which lends so much interest to the forthcoming Gordon Bennett Cup race. While the French are putting big engines into their vehicles the English are building cars which, by comparison, are light and very low powered, and they claim they are justified in doing this by the state of the Irish roads, that will not allow of the vehicles travelling at such a high rate of speed as is possible in France. Remembering the experience of last year, when two of the French cars paid the penalty of light construction with high powers on the first day's run, while the Panhard was demolished on the Austrian roads, the English makers have come to the conclusion that a race of this kind is a test of reliability rather than of exceptionally high speed, and they have built their cars for what they think it is possible to do on the Irish roads. It will be interesting to see whether last year's struggle between speed and reliability will be repeated. It should not be overlooked, however, that in the 90 horsepower Mercedes it would appear as if they had both. The preliminary qualifying race will take place next week between three Napier cars and a Star, the last named being built on the lines of the Panhard. Besides the American cars the other vehicles competing for the Gordon Bennett Cup will be three Mercedes, two Panhards and a Mors.

#### Vickers to Manufacture Cars.

It is announced that Vickers, Sons & Maxim, Ltd., the big British steel makers, have decided to enter the automobile field. As a starter work has begun at the works at Crayford, Kent, on 1,000 cars. These will be two seated voiturettes—resembling the runabouts in use here—seating two persons and weighing about eight hundredweight—800 pounds.

#### Conrad Again Enlarges.

The Conrad Motor Carriage Co., Buffalo, has leased 30,000 square feet of space in the Ross Building, the facilities in its own building not being sufficient to take care of the increased work due to the rush of orders. The company expects during the summer to add to the size of its own plant. The factory is now running night and day, twenty-two hours out of the twenty-four.

Entrance fees for the Paris-Madrid race totalled the neat sum of 73,150 francs, or \$14,630.

## BRITISH CUP TEAM CHOSEN

Edge, Jarrott and Stocks the Men and Napier the Cars—Other Candidate Shows Badly.

Within the week the vacancies on the teams destined to contest for the Bennett Cup have been filled, and the composition of the four teams is now complete. The British club held an elimination test to select the third car on its team, while those to represent the French and German clubs were chosen without tests. As now agreed upon, the teams will be as follows:

Great Britain, three Napier cars, driven by S. F. Edge—the winner of the cup last year—Charles Jarrott and J. W. Stocks, respectively.

America, two Wintons, driven by Alex. Winton and Percy Owen, and a Peerless, driven by L. P. Mooers.

France, two Panhards and a Mors; their drivers are yet to be chosen.

Germany, three Mercedes; no selection has yet been made of their operators.

From the unsatisfactory cable reports at hand it appears that the British trials set for last Saturday and Sunday embraced speed tests on the former and hill climbing tests on the latter day. As a result the Star car was decisively beaten on the famous Dashwood Hill. Three Napier cars were pitted against it, and all three made better performances. Of these three Napier cars, two—those driven by J. W. Stocks and C. S. Rolls—were very evenly matched, the former winning by 51.5 seconds, the Star car being 3 minutes and 22 seconds behind.

As has already been stated, the race will take place in Ireland on July 2. A course of 363 miles has been laid out, starting a few miles outside of Dublin.

#### Baltimore Lawyer's Bid for Notoriety.

Richard Bernard, a Baltimore, Md., lawyer, is "agin" the automobile. He has written to the president of the Park Board making a recommendation concerning them. They should be excluded from roads with sloping embankments; or, if this drastic measure be not adopted, such roads should be protected by strong fences erected on the downward slope.

"These fences detract from the beauty of the park," he admits, "but if the legislature is to be controlled by automobile dealers that is all the commissioners can do."

#### Where the Demand is Brisk.

"When I left home on Wednesday our retail store had unfilled orders on the books for exactly ninety-one cars," was the satisfied response of W. E. Metzger, the well known Detroitter, to the usual "How's business?" The question was put to him while he was in New York on a flying trip on Friday last.

### Up Duffy's Hill With a Load of Ten Men.

One of the sights that causes passengers in the Lexington avenue trolley cars in this city to gasp is the grade beginning at 102d street. At first sight it looks like the side of a precipice. It is known locally as Duffy's Hill, and is becoming the scene of many impromptu hill climbing contests. One day

last week Manager Greene, of Wanamaker's, loaded up a Searchmont—one of the demonstration cars—with ten men and started out to see how difficult the hill really was. To his surprise it proved easy. As the illustration shows, he went up without the slightest trouble, notwithstanding his

enormous load of closely packed humanity.

The gradient of the hill is said to be 16 per cent. But the average man would be more likely to place it at 46 per cent., so steep does it appear. Its rough pavement of Belgian block adds considerably to the task of surmounting it.



### Friedman Sues for \$100,000.

Suit was brought on Thursday last in the Chicago Superior Court by the Friedman Automobile Co. of Chicago against the National Sewing Machine Co. of Belvidere. Damages in the sum of \$100,000 are asked for, it being alleged that the defendants violated a contract to furnish the plaintiff with automobiles.

The Friedman is a double cylinder gasoline runabout, which has been on the market for a little more than a year. It was built by the National Sewing Machine Co. under contract.

By Sunday next the New Jersey Automobile Company expect to be installed in their new building on Halsey street, south of Market street. L. S. Wheaton, the financial head of the company, will assume the active management.

### Rumford Falls's Factory Makes Ready.

Machinery is being installed and work will be started immediately on the cars which the Bouton Automobile Company, of Rumford Falls, Me., propose to turn out. Ten men will be employed at the start, but this force will be steadily augmented. Celerity of operations is looked for, as will be seen when it is noted that the first vehicle is expected to be finished early in May!

The Bouton Company was organized by Massachusetts capitalists to construct automobiles invented by one Bouton, described as a "cousin of Dion, the inventor of the famous French machine." He was employed in the De Dion-Bouton factory, it is claimed, and, being familiar with the construction of the cars built there, he devised an improved car. It is this that is being built at Rumford Falls.

### Car for New York's Street Cleaner.

Dr. Woodbury, Commissioner of Street Cleaning, is, as is well known, a keen motorist. When he had occasion last week to ask for authority to purchase a vehicle for his own use in performing the work of the department, therefore, he requested that an automobile be given him. The Board of Estimate approved the request on Friday. The specifications call for a four-seated automobile.

### Makes Medina an Offer

The Medina, O., Board of Trade is considering a proposition from F. E. Edwards of Cleveland, to establish an automobile factory at the former place. With great modesty he asks only that citizens of Medina subscribe to \$100,000 worth of stock and furnish a site. Edwards will do the rest.

## FLATS TREADS FOR TIRES

**Foreign Feature That Finds no Favor Here—  
Rubber Expert Gives the Reasons.**

European tire makers are giving the subject of special shaped treads considerable attention. The Continental and other big concerns have already brought out such tires, and appear confident that they will meet with a good reception. The object sought is, of course, the lessening of the liability to slip, and it is contended that a tire with a flat or square tread will prove more stable than the regulation round or oval shape. There are not wanting others, however, who take just the opposite view.

"Tires with flat treads?" repeated Manager O. J. Woodard of the Diamond Rubber Co.'s New York branch, to whom the Motor World man had put the question. "Yes, we know something about them. We should, too, seeing that we made a number of them a couple of years ago.

"In the first place, a tire with a flat tread—or any other than the regulation shape—is not as stable as one with a round tread—that is, it does not accomplish the object of its design. It will slip more readily than an ordinary tire, and when it begins to go it will slip worse. We experimented with such tires until we were thoroughly convinced that such was the case, and then we dropped them.

"Secondly, tires of this shape have nothing to recommend them to either users or the trade. They are heavier and therefore more costly than the ordinary tire, and they are more difficult to make and give more trouble than the round section.

"You see, to make a tire with a flat tread you have got to get the flatness by using more rubber. To all practical purposes it is the same as if you took a round tire and built it up with rubber until you got a tire with square edges and a flat tread. You can readily see how, with a three or four inch tire, this takes an enormous quantity of rubber. Then, again, you encountered manufacturing difficulties with such tires. The tread is constantly trying to part company with the remainder of the tire, and it frequently succeeds in doing so. That is annoying as well as expensive, and when it is remembered that no advantages result from the use of such a tire it is easy to see why we stopped making it.

"To put it in a few words, we stopped making them because they were no good. European makers can try them and learn this by experience. It will cost them something, as it did us; but they will be well posted when they get through.

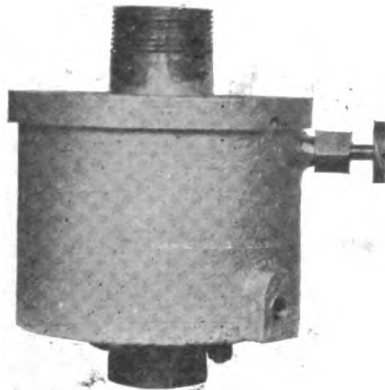
"Speaking of troubles with tires," he continued, "it is a fact that nearly all of them are due to faults of the users. I figure that 80 per cent of the mishaps to tires of the clincher type are traceable to improper attachment. The cover will be taken off to re-

pair or replace an inner tube, and the latter will be twisted or kinked. Then, after the car has been run awhile, the tube will get pinched or the cover blow off, with disastrous results. The processes of manufacture have been so improved that imperfect tires now have scarcely to be reckoned with."

## Carburettor That Will Use Kerosene.

In designing the carburettor that bears their name, R. W. Coffee & Sons, Richmond, Va., had in view both the limited number of such devices on the market, and the possibility of improving their construction.

The carburettor is of the float feed type, but both the gasoline receptacle and the mixing device are contained in a single chamber. This permits the construction of a compact, yet simple and reliable carburettor adapted for use on all gasoline cars.



The device is made in two sizes, the smaller having a diameter of four inches and being intended for cars up to 8 horsepower. The other is slightly larger and will supply the mixture for cars of any horsepower.

The usual semi-circular copper float feed regulates the supply of gasoline to the tank. Through the centre of the carburettor is run the airpipe, which is 1 inch in diameter in the small size and 1½ inches in the large, and into this pipe the gasoline is drawn by suction through a small vertical tube having an orifice at the bottom. A needle valve permits a nice adjustment of the flow of gasoline, and this valve once properly set need not be changed, as an absolutely automatic regulation of the mixture is one of the features of the device. The large airpipe insures a generous supply of air at all times, and this is relied upon to produce the intimate mixture of the gasoline and air that is so essential to the production of a good explosive gas. The airpipe is supplied with a cutoff at its lower end, which is sometimes found useful in starting, as with it closed the mixture can be enriched to any desired extent.

A valuable feature of the carburettor is its adaptability to the use of either gasoline or kerosene. It will mix both equally well, and without change of any character being required. The Coffee carburettor can be readily applied to any gasoline car, the method of attachment being exceedingly simple.

## STANLEY ON STEAM BOILERS

**Tells Technology Institute What he Considers a  
Perfect Boiler and What it Should do.**

In speaking on "Problems to be solved in the building of the perfect steam-propelled automobile" before members of the Society of Arts of the Massachusetts Institute of Technology, in the Walker Building, last week, F. E. Stanley gave his attention chiefly to steam generation and heat, and especially to the method of superheating steam.

He believed the chief requisite of the perfect boiler to be minimum weight and cubical contents in proportion to its efficiency, such form as to adapt it to the space provided without distorting the outlines of the vehicle, maximum capacity for heat storage, construction to absorb the maximum percentage of heat, which can only be accomplished by discharging the product of combustion at the lowest possible temperature; economy in manufacture; durability, with small liability of injury by accidental neglect, and ease of repair, he said. It must also furnish steam at a uniform temperature and at any pressure required to run the engine. The temperature must be uniformly as high as practicable without injury to the valve, pistons or cylinders.

More of these conditions are to be found in the multiple upright boiler than in any other style. One of the greatest problems to solve was the securing of steam free from entrained moisture from a boiler full of half-inch tubes, with only six inches or less of steam space above the water for the steam to free itself.

## Ten Per Cent for Spaulding Creditors.

On Monday next, May 4, a meeting of the creditors of the Spaulding Automobile & Motor Co. will be held at 11 a. m. in the Bankruptcy Court room, No. 319 Main street, Buffalo, N. Y. Trustee Thomas E. Lawrence, reports that the sum of \$2,695.99 is on hand, and one object of the meeting is for the purpose of declaring and directing the payment of a first dividend of not less than 10% to creditors. Notice is given by W. H. Hotchkiss, referee in bankruptcy, that unless proofs of debts are filed before this meeting creditors cannot share in such dividend.

## C. C. C. Secures More Room.

Property consisting of a large manufacturing plant and the ground on which it stands, situated at South Boston, Mass., adjoining the works of the Country Club Car Co., has been purchased and conveyed to that concern. It is stated that it will be added to the present plant and used in the construction of its product.



# The Metropolitan Salesrooms and Garages—VIII

Although neither the oldest nor the largest of the metropolitan garages, the establishment of John Wanamaker, 138 and 140 East Fifty-seventh street, has for nearly two years been a busy and important place.

tained it without diminution ever since. In fact, the demands for storage space have become so great that the need of better facilities has long been felt, and the recent merging of the salesroom formerly main-

sociation of retail grocers. It was used as a meeting place, with a dance hall for occasions of festivity, in which the wives and daughters of the grocers participated. It fell upon evil days, however. A saloon was



JOHN WANAMAKER'S AUTOMOBILE STATION, 138-140 EAST 57th STREET.

Fronting on one of the city's widest asphalt paved streets, with a sidewalk of unusual width also, and but a few yards from Park avenue, the location is a most excellent one. Consequently it secured a good clientele when it was opened, and has re-

tained at the Ninth street store with the storage place has made this a necessity.

The building occupied is 35 feet in width by 100 feet deep, five stories in height. It still bears on its front the name "Grocer's Exchange," having been erected for an as-

installed on the ground floor, and even with this attraction it could not be made to pay.

In the summer of 1901, when the Wanamaker people looked around for a likely place to open a garage, the Grocer's Exchange attracted their attention. Upon



opening negotiations it was found that the grocers were very willing to yield possession of their white elephant, and satisfactory terms were soon agreed upon and the building passed into the possession of its new tenants.

Until within a few weeks, when it was made a salesroom also, a public and private storage business only was done. More than 100 cars—electric, steam and gasoline—are regularly stored, repaired and cared for. To handle this volume of business a score of men are required and are kept constantly employed. The help is of a high class, and the place has always had the reputation of giving the best character of service.

Immediately upon obtaining possession of the property arrangements were made to install facilities commensurate with the standard of appointment it was determined to set. Electric arc lights were put in, a commodious elevator running from the basement to the top floor, cleaning and washing pits, electric charging outfits, etc. These have gone far toward overcoming the disadvantages incident to the narrowness of the building and its comparatively limited area.

In the front of the basement, well out under the sidewalk, is the furnace room, which supplies steam heat for the entire building. To the right of this room is the gasoline storage compartment, measuring about 4x15 feet. It is lined with asbestos, and fitted with an iron door, which is kept locked. Formerly it was the practice to keep the gasoline in bulk, but that method has been discarded, and the volatile spirit is now kept in cans.

The remainder of the basement is used as a repair shop, lighted from a number of windows in the rear. The equipment of the shop is such that almost every class of work can be done. The power is supplied by an electric motor, and engine lathes, drill presses, grinders and other power machines are in constant operation, together with the usual accompaniment of bench tools, etc. A portion of the shop is set aside as a battery room. A hydraulic lift for handling heavy electric batteries is installed, together with a complete charging outfit.

The first or ground floor is on a level with the street, and here the arriving and departing cars are run. To the right is the superintendent's office, where reports of coming and going cars are reported. The greater part of the floor is devoted to the storage of the demonstration cars, and those in most frequent use. In the rear are two washing pits and the power operated elevator, the latter protected by huge doors.

The second floor was the meeting hall of the Exchange. The high ceiling, the big electric and gas light chandeliers, and the gallery strongly suggest the original use, and the presence of closely packed cars on the floor appears incongruous. But the noise of debate has been succeeded by the silence of what closely resembles a carriage repository, the cars here being merely run in and left there until they are used.

In the front of this floor are the main office and a 15x10 foot sundry room. In the latter are kept the lamps, horns, caps and other sundries and accessories, displayed for the convenience of purchasers. The office contains Manager Greene's sanctum and the bookkeeper's and typewriter's quarters, etc.

The next floor, the third, ends with the gallery, which overlooks the former meeting hall. At the front is a room set apart especially for the chauffeurs and other employees. It is fitted up with individual lockers, washroom, chairs, a big writing and reading table, and is spacious and well lighted, commanding a good view of Fifty-seventh street.

Storage cars occupy the whole of the fourth floor, while the fifth is given over to the janitor and his family, who is in attendance all night, so that ingress can be secured at any time.

As already stated, the need of additional space has been felt for some time, and negotiations are under way which will, if successful, provide an outlet for some of the cars on storage and make room for a display of new cars. These, consisting of the Searchmont, Studebaker and Rambler, will be shown on the main floor.

#### Metropolitan Storage Rates.

Transient storage is usually charged for at the rate of 50 cents to \$1 a day, or night. This does not cover any attention. For the latter, cleaning, lubricating, etc., 25 or 50 cents additional is charged. Monthly rates are, of course, much less, usually about one-half.

#### Started Steamer in 2:40.

"What is the quickest time in which a steam carriage can be got ready to run? I started one in two minutes and forty seconds, and I don't think the time has ever been beaten," remarked a tradesman who has had much to do with that type of car.

"This was a couple of years ago, in Philadelphia, where I was then located. I took a car that was perfectly cold, and the watch was snapped on me when I made the first move. In just the time stated I had the main burner going, with an ample supply of steam, and opened the throttle and started the wheels. Pretty good time, I think, and so did those who watched me. Wonder if any of your Motor World readers know of any case where it was done in less time?"

#### Club for Business, not Pleasure.

It appears that the Hopkins County Automobile Club, the incorporation of which was recorded in last week's Motor World, has been organized to do a mercantile business. It is authorized to "buy, sell, own, operate, lease, let, hire or manufacture motor carriages, automobiles or by whatever name they shall be called." The office and place of business are in the city of Madisonville.

#### Kingman to go Abroad.

J. A. Kingman, of the Locomobile Co. of America, has booked passage for Europe, and will sail on May 18 next. He will be absent a month or more.



J. R. SNOW, BOSTON, MASS., IN HIS PEERLESS TOURING CAR.

## RECHARGING ELECTRIC CARS

### How Matters Have Been Facilitated and Apparata Placed Within Reach of all.

The question of charging outfits is one that is vital in the consideration of electricity as a motive power for automobiles. The increasing and deserved recognition of the merits of the electric driven vehicle has called the attention of the public to the imperative demand for a charging outfit that shall be inexpensive, thoroughly reliable, substantial, compact and easily manipulated.

Were it not for the ignorance sometimes displayed it would be hardly worth while to repeat that the efficiency of the electric automobile mainly depends upon the performance and maintenance of its battery, and in order that the battery shall do the work for which it is designed and built it requires proper care. For that proper care it is necessary that the charging station shall, in its turn, satisfactorily meet all the practical requirements of everyday service, including use by those unfamiliar with storage battery charging, and limited opportunities for attention thereto.

Added to the above requirements is one that, if not of importance from a mechanical standpoint, is essentially of prime interest to both the manufacturers and purchasers of electric outfits, the installation with as little expense as possibly is consistent with reliability.

It is the meeting of these demands, requiring no little thought, skill, experiment and expense upon the part of the manufacturer, that makes the product of the Westinghouse Electric and Mfg. Co. worthy of attention.

Charging may be derived from any one of three sources: direct current, alternating current or independent power.

Combinations and variations admit of 168 different styles of charging outfits, a sufficient variety to meet any and all of the peculiar conditions or demands of either the private or public charging stations. With these combinations, one, two, four, twelve or more automobiles can be charged at once.

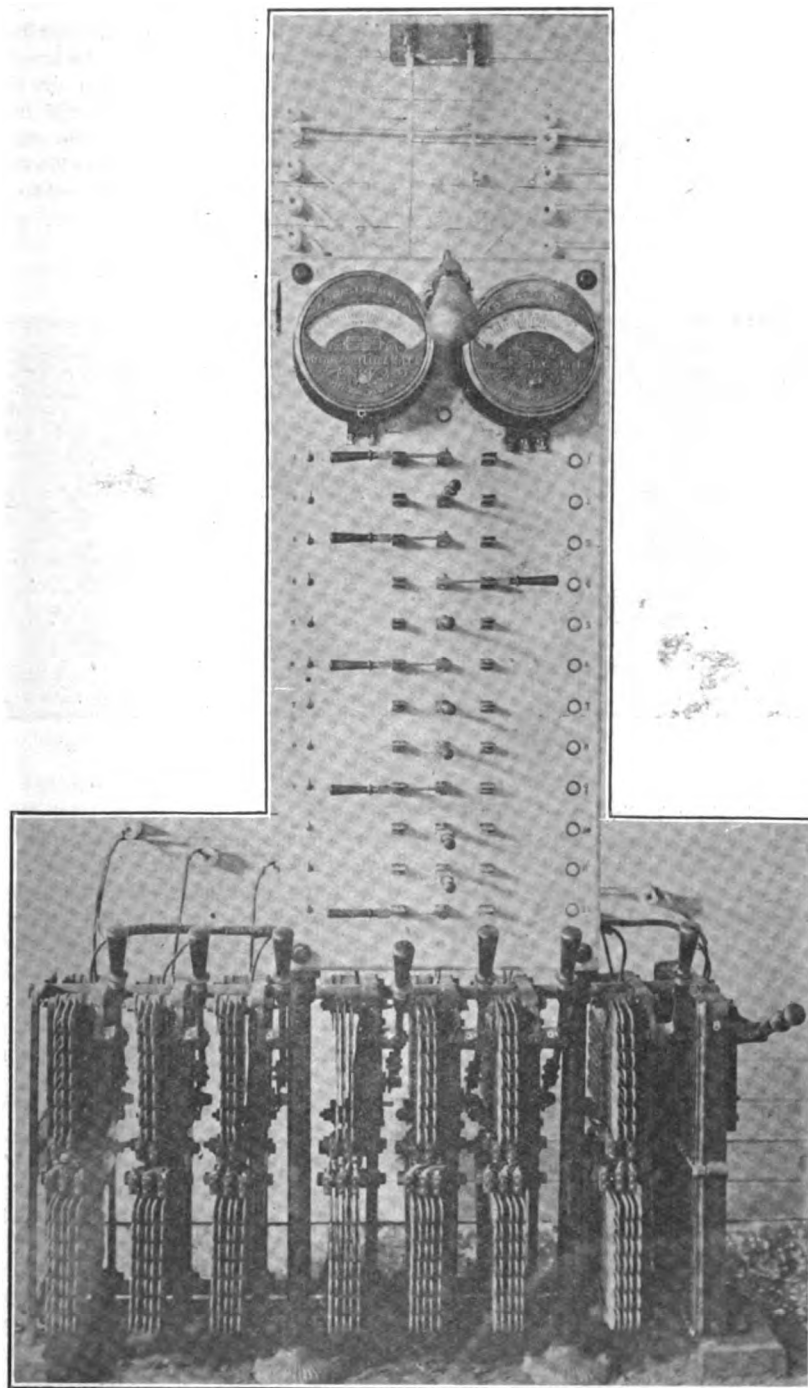
The outfits for charging one or two machines are intended for private use; that with a capacity of four is suitable for clubs, country houses, or small stables, while the standard twelve service is applicable for use by public garages, express and cab companies, or other establishments having a number of vehicles.

One of the chief advantages of the garage installation shown in the illustration, the only one having this valuable feature, is that all controls are at one point, with minimum apparatus. Instead of, as in the former practice, having them individualized and spread over considerable space, involv-

ing double the trouble and expense. There is also a saving in that instead of being compelled to use twelve voltmeters and twelve ammeters, one of each is sufficient.

Another important item is that the charging may be in serial or simultaneous. The cut shows one of these garage switchboards

switch to the left places a battery in "charge," reversing to the right connects the ammeter so that the current may be read. The voltmeter will indicate for the whole main line, or by pressing the push-button corresponding to any switch the voltage reading of its stand can be taken. A



GARAGE CHARGING OUTFIT.

with the series rheostats installed below it for controlling the charging rate of the various batteries. In this particular case rheostats are provided for eight vehicles, the greater capacity being obtained at any time by adding the requisite number of rheostats.

Each switch on the board is numbered to correspond with the number of its rheostat and charging stand. The throwing of a

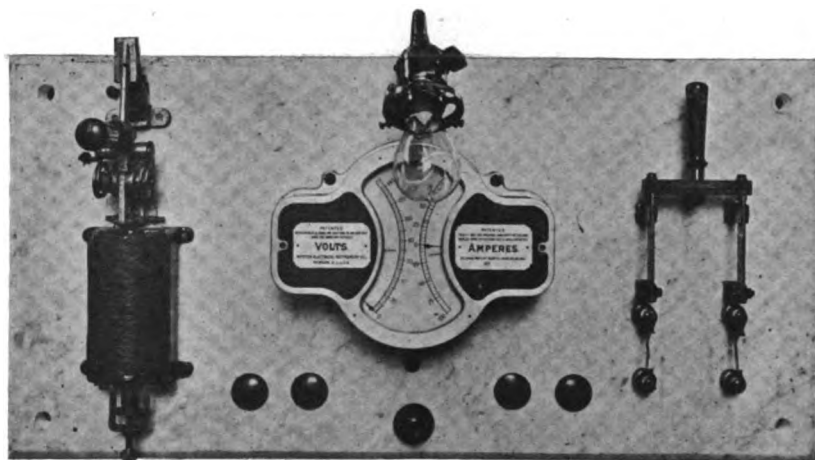
separate pushbutton gives the voltage reading on the line beyond the rheostats. Opposite each switch is a numbered hook upon which the charging record of the battery may be kept.

In connection with this central switchboard automatic circuit breakers and fuse blocks are to be used at each charging stand. These switchboards may be connected with any 125-volt, direct current

line, whether from central stations, motor generator set, or independent circuit.

For the one or two vehicles of the private owner, or the small garage designed for four machines the panels are as shown, with the necessary modifications in each case, and are adapted for direct current voltage of 110 to 125. For single charging the automatic circuit breaker is mounted directly upon the panel with the meters and fused switch. Where two or more automobiles are to be charged the circuit breakers are displaced by switches, and the over-voltage circuit breaker and fuse blocks are located at the carriage charging stands.

The details of the outfits are of standard Westinghouse make, and are as follows:



PRIVATE SWITCHBOARD.

The panels, of white Italian marble or marbelized slate. The meters, which for private use may be a combined voltmeter and ammeter, are provided with sub-scales and convenient terminals for reading voltages of individual cells, with volt scale from 0 to 150, sub-scales 0 to 3, and ampere scales 0 to 100. The switches of standard Westinghouse type D, of the normal capacity of fifty amperes for each charging circuit, the line switches being fused. The circuit breakers, under normal circumstances, automatically cut out the battery when the charge is completed, and in all cases protect the battery from any over-charge danger or damage, enabling the owner or attendant to set the charge and pay no more attention to it until the machine is again wanted for use, without loss or damage of any kind. The motor starter rheostats, employed in starting the direct current motors, are mounted on the back of the panels, with handle projecting through; the same as with the generator field rheostats. Where a generator is employed, the latter are used for the regulation of the battery charging of one carriage, without requiring the additional series rheostats of the grid or imbedded type. Where the series rheostats are needed they are made in one of three types—grid, imbedded or combined. In the first form they are mounted on the floor directly below the switchboard, the grids being

of cast iron, set in the open air, thoroughly ventilated, and, while they are normally made to carry sixty amperes each, they can be immensely overloaded without injury, surviving unhurt where other types burn out. This is an important point, since it obviates all danger of battery injury by the burning out of the rheostats, a danger that has been and in some types still is found only too frequently. The imbedded type of rheostat is in two styles, designed for use with either ten to fourteen or twenty to twenty-four cells, when charged from a 125 volt line, will each carry continuously thirty amperes, and may be mounted with several of the same type or with the grid type.

The life of the battery itself practically

has no limit. Its efficient existence is merely a question of renewing the plates at long intervals when they are worn out.

One of the greatest advantages of the Westinghouse outfits is that they have no loose wires, thus doing away with all danger from fire. If, from ignorance or carelessness, a mistake is made by the operator, the fuses supply the deficiency by cutting out the current, obviating any injury to the batteries or switchboard. There is nothing complicated about them, nothing requiring technical training or skill, nothing that any man with ordinary mental capabilities cannot master in five minutes. They occupy but little space, the panels for private use being only 14x28x1¼ inches thick, those for public garages 22x48x1¼ inches.

The direct or alternating current motor generators furnished by the Westinghouse Electric & Mfg. Co. are of standard type, and adapted to the panel used, transforming high voltage direct current to the proper voltage, or changing alternating current to the desired voltage, direct current for charging. These present an advantage in that, being standard, they are always a marketable commodity.

In cases where the owner prefers his own isolated plant of gas or other power for driving a generator, accessory apparatus to meet the requirements has been added to the outfits.

### To Keep Tools From Rattling.

The stowing away of tools so that they will not rattle and yet be easy to reach and put back into place again is one of those small problems in which every motorist is more or less interested. There are many ways of carrying one's tools, the most unsatisfactory of which is the indiscriminate mixing up in a drawer located beneath any one of the seats in the car. In the first place, when even a small tool is required it means a complete dislodgement of the passenger in order to get at the drawer, and he has for the time being to assume a more or less uncomfortable position.

A better method than this is the leather case in which each tool has its own place, the whole being wrapped up into a roll and bound with a strap and placed in any convenient part of the car. An excellent method is to make a case fitting on to the face of a door, or inside the door of one of the cupboards beneath the seats. This case would simply consist of a piece of light wood, about three-quarters of an inch thick, in which recesses have been cut out right through the wood to fit every size wrench or tool which one carries in the ordinary way. One or two swinging spring clips should be fitted to press upon the tools when they are in position to keep them from falling out or from making a noise, though enabling the motorist, when any tool is required, to find and withdraw it readily. When the tool or tools have been finished with they are just as easily replaced and clipped in position. If a tool be found to be missing it can at once be looked for and restored to its place. This is certainly a much more satisfactory method than travelling a few miles and then finding that in the process of packing up one or more tools have been left in some unremembered spot.

The arrangement suggested has, of course, the same disadvantage of disturbing the passenger, unless the tool casing is made to fit upon the dashboard or in any other convenient place.

### Thinks Interrupters Retard Spark.

"It seems to me that the use of 'interrupters' would have the effect of retarding the spark," remarked a motorist who is fond of investigating new things. "I have bought four of them, and am going to try them on my car largely to see how this works."

"When the current reaches the gap and makes its jump across it there must be a momentary delay, as compared with an igniter that has no gap. That means that, as the piston is travelling at its normal speed all the time, the spark will fire when the piston is pretty far down in the cylinder. The only way to correct this tendency is to advance the point of sparking sufficiently to overcome this retardation that has taken place. Of course, that can easily be done, but I should think that until one gets used to it the lateness of the explosions will be rather puzzling."

## EASY TO COLLECT DAMAGES

### Illinois Legislature Enacts a Law for the Benefit of Owners of Horses.

In the Lyon automobile bill, introduced in the Illinois Legislature, and which passed the House last week, motorists have a measure that bears hardly on them in some sections and is sane and simple in others.

It fixes the maximum speed of automobiles at 12 miles an hour, making no distinction between city streets and country roads. It is provided, however, that the authorities of incorporated cities or villages may, by ordinance, permit greater speeds than this. The penalty for violations is elastic and may be severe. It consists of the imposition of a fine of not less than \$25 nor more than \$200, and the violator may be jailed not to exceed three months, or both fined and jailed.

The other two sections relate to stopping on signal and to the matter of damages. It is held that the plaintiff in a suit need only show that he was injured and that the defendant was exceeding the legal speed to make out a prima facie case.

The bill in full follows:

Section 1. That it shall be unlawful for any person or persons to drive, run, conduct or propel any automobile or other conveyance of a similar type or kind used for the purpose of transporting or conveying passengers or freight for any other purposes whether said automobile or conveyance or such other vehicle is propelled by steam, gasoline or electricity or any other mechanical power at a rate of speed in excess of 12 miles per hour upon any public street, road or highway in the State of Illinois, provided that nothing in this section contained shall prohibit or prevent the running of such automobiles, or vehicles at a greater rate of speed than 12 miles per hour upon such streets within incorporated cities or villages as may be set apart for use of such automobiles and other conveyances, and upon which said cities or villages may, by ordinance, permit, a greater rate of speed than herein specified.

Sec. 2. Whenever it shall appear that any horse driven or ridden by any person, upon any of said streets, roads or highways is about to become frightened by the approach of any such automobile or vehicle, it shall be the duty of the person driving or conducting such automobile or vehicles to cause the same to come to a full stop until such horse or horses have passed.

Sec. 3. Any person or persons violating the provision of the foregoing sections one (1) or two (2) shall upon conviction be sentenced to pay a fine of not less than twenty-five (\$25) dollars, nor more than two hundred (\$200) dollars, and may be confined in the county jail not to exceed three (3) months, or both in the discretion of the court.

Sec. 4. In any action brought to recover any damages either to person or property caused by running such automobiles or vehicles at a greater speed than designated in section one (1) the plaintiff or plaintiffs shall be deemed to have made out a prima facie case by showing the fact of such injury and that such person or persons driving such automobiles or vehicles was at the time of the injury running the same at a speed in excess of that mentioned in section one (1).

Sec. 5. All acts and parts of acts in conflict herewith are hereby repealed.

### Pittsburg Outlines its Ordinance.

The first draft of an automobile ordinance which is to be introduced in the Pittsburg, Pa., City Council has been prepared and placed in the hands of a special committee of that body. It will be submitted to the City Solicitor for approval and then introduced.

The ordinance as drafted provides that an automobile must carry two white lights in front and a red light in the rear from one hour after sunset to one hour before sunrise; that the driver must carry a horn or bell to signal whenever he approaches a pedestrian, another vehicle or an intersecting street. When approaching a vehicle drawn by an animal he must slacken the speed of the machine and stop if requested to do so by the occupant of the other vehicle. He must have appliances to muffle the sound of escaping steam or gas, and take proper precautions to prevent the machine running off or some other accident happening while he leaves it standing temporarily in the street. Any person tampering with the machine while the driver is absent is liable to arrest.

The speed of an auto downtown is limited to six miles an hour and in other parts of the city to ten miles an hour. The owner of the auto is obliged to carry a license plate conspicuously displayed on his machine. For any violation of the ordinance a fine of not less than \$25 or more than \$100 is prescribed for each offence.

### Italy's Americanlike Law.

New regulations for automobiles have been promulgated by the Italian Minister of the Interior. The owner of an automobile must now be provided with a special license issued by the public security authorities. The automobile must carry, graven on a white enamel plate, in black letters not less than 6cm. in height, the number of this license and the name of the province in which it was issued. The same inscription must appear on the red lantern on the front of the automobile. Non-compliance with these requirements is punishable with a fine of not less than 100 lire. Within two months of the promulgation of the decree all owners of automobiles must have complied with these regulations.

### Sues for Damage to his Car.

Because the town of Union Hill, N. J., does not keep its streets in good condition G. Motti proposes to compel it to pay for the repairs to his automobile. He has addressed a letter to the Board of Council, in which he states that opposite No. 149 Kosuth street there is a hole, and that his automobile was so jarred by striking into it that the delicate mechanism of the machine was put out of gear and so badly damaged in consequence that considerable repairs were found to be necessary. These repairs he demands the town shall pay for.

The novel demand was referred to the Town Attorney for investigation and an opinion.

## MUST STOP AND "ASSIST"

### Michigan Adds its Quota to the Automobilists' Burden—Damage Suits Invited.

The Michigan Legislature is wrestling with a bill almost similar to that pending in Illinois. There no licenses or tags are required, but it is made the legal duty of the automobilist to not only stop his car should a horse show signs of fear, to "assist the driver," exactly in what manner is not made clear. The measure, which is fathered by Representative Holmese, follows:

Section 1. Every person who shall drive, use or operate an automobile propelled by steam, gas, electricity or other artificial power upon any of the public highways, boulevards, streets and public grounds of this State, except in cases where the municipal authorities of any city or village shall have provided for the regulation thereof within its jurisdiction by ordinance or resolution under existing authority, shall be and is hereby directed and required in all cases when such conveyances shall meet or pass a conveyance drawn by such horses or such horse or horses shall exhibit or display fright or fear of such automobile to steer such conveyance to the right of the wrought or travelled portion of the road or highway and bring the same seasonably to a full stop and to keep the same in such position until all danger of accident or injury to the occupants of such conveyance and to said horses and property shall have passed.

Sec. 2. It shall be the duty of the person in whose custody such automobile shall be under such circumstances and all other occupants thereof to assist the driver of such horse or horses to pass and be removed from all danger on account thereof.

Sec. 3. Any person or persons who shall violate or refuse to perform and discharge the provisions of sections one and two of this act shall be liable in an action or case to the person injured for all damages both direct and consequential arising therefrom, and any and all damages which may be recovered against such person or persons shall be and is hereby created a lien against such automobile as of the date of such injury. Such lien shall attach subject to the recovery of a judgment for such claimed damages upon the filing of a statement in the office of the city or township clerk in like manner in all cases as provided by law for the filing of chattel mortgages under the laws of this State, which statement shall recite under oath the date of the injury complained of, the amount of damages sustained as near as may be, the name of the person claimed to be liable therefor and the description of the automobile and the name of the owner thereof. Such statement shall be notice to all persons of such lien and no sale, mortgage or conveyance thereof shall be valid as from such date, except subject to the interest which may be established under such proceedings, and such lien shall remain as a valid and subsisting claim against such automobile until such suit shall be determined, providing suit is commenced to enforce such claim within sixty days after the filing of such notice of claim. Any person who shall have obtained a judgment in such suit or proceeding shall be entitled to enforce the same by levy upon such property under an execution regularly issued upon such judgment, and such lien shall be enforceable under execution in like manner as other property seized upon such writ against the judgment debtor, whether such judgment has

been rendered against the owner thereof or not: Provided, however, such owner thereof as of the date of such injury shall have been notified of such suit and been thereby permitted to defend the same.

Sec. 4. Any person who shall violate sections one and two of this act shall be deemed guilty of a misdemeanor and upon conviction thereof before any court of competent jurisdiction shall be punished by a fine not to exceed fifty dollars, or imprisonment in the county jail not to exceed sixty days or both such fine and imprisonment in the discretion of the court.

#### Speed Register From Germany.

An instrument that is designed for registering the speed of railway cars, but which is claimed to be equally applicable to automobiles, has been placed on the market by a Frankfort, Germany, man.

The speed indicator is small and very simple, cheap, strong and not easily to be got out of order. A small accumulator sends a constant current in a circle in which there is an interrupter or trembler, which is kept at work by the revolutions of one of the carriage wheels, recording an interruption at every revolution of the wheel. The electric current goes also through a transformer consisting of a small induction coil, whose second layer is connected with an ordinary voltmeter. The quicker the interruptions of the main current the higher must be the tension of the voltmeter, and instead of a scale per volts, a record for the mileage travelled is added to the measuring apparatus. The hand shows with absolute regularity the speed with which the car is travelling.

#### Usefulness of the Jack.

Few experienced motorists will start off on a trip of even fifty or 100 miles without seeing that a lifting jack is stowed away along with the other repair odds and ends. It is usually small and compact enough to

be stowed away without encroaching much upon the room devoted to other impedimenta, and its value in case of tire trouble is almost inestimable. Without it motorists frequently find themselves in unpleasant straits. A block of wood or similar appliance is not always easy to find, and even when it is the operation of raising the wheel from the ground is a much slower and more ticklish job than with a jack.

#### Miller's "Water Watch."

An instrument that is becoming popular in this country—being regularly fitted to most of the French and English cars—is the Miller



Manometer, supplied by Charles E. Miller, No. 97 Reade street, New York. As its name denotes, the Manometer is a pressure gauge, and is intended to register the pressure and show the circulation of water on gasoline cars.

In general appearance the Manometer resembles a steam gauge. It is furnished in a highly finished brass case, with a bevel glass face, and is made of the very finest materials. It will last for years, and is found extremely useful in relieving operators of cars of all anxiety regarding the proper working of their water supply system. The figures on the dial are clear and of good size, making it easily read.

#### Skill in Washing Cars.

That there is always room at the top is true of pretty nearly every line of business. Even so humble an occupation as automobile washing proves no exception to the rule. The Motor World man came across an illustration of this the other day, which went far to show the difference in methods employed in the various garages.

"There are the two best paid washers in New York," remarked a salesman in one of the uptown garages, pointing to a couple of men who were deftly removing the traces of a Sunday run from a tonneau car. "They get \$16 a week apiece, and are worth every cent of it.

"On Saturday these two men handled forty-two cars between 6 o'clock and midnight, getting them ready for their owners on Sunday. That is a record, I think, considering the amount of work they put on each car. They go over them with a pail of warm, soapy water and a sponge, and when they get through the car is clean and as good looking as it can possibly be."

#### Dressing for Clutches.

An excellent clutch dressing is to be made up by mixing castor oil and commercial glycerine in equal proportions. This requires to be thoroughly well mixed by placing the ingredients in a large stoppered bottle and well shaking up from time to time. It should be applied to the leather as thinly and as evenly as possible. It appears to keep the leather nice and soft, and yet prevents it from screaming when the clutch slips, and at the same time it retains the full gripping power necessary to drive the car. With this dressing it is perfectly safe to slip the clutch to admit of the engine picking up a little when negotiating gradients, thus enabling the car to overcome them without the necessity of changing down to a lower gear, the latter being necessary only when climbing more than ordinary hills.

## SPECIFY THE SPERRY BATTERY.

It has never been equalled for Automobiles.

WRITE FOR PARTICULARS.

NATIONAL BATTERY COMPANY

NEW YORK BRANCH, 147-149 West 55th St.

BUFFALO, N. Y.

USE THE KING OF  
The Michelin, 12 East 27th Street,  
NEW YORK CITY. TIRES



## CARELESSNESS AT FACTORY

How it Vexes and Adds to Dealers' Expenses—  
One Car as an Example.

"Why don't makers take a little more care in assembling cars? Do they think that because of the big demand anything will go if it has wheels, a seat and a motor? If so, they will find that they are much mistaken," exclaimed an indignant salesman to the Motor World man last week.

"We have cars coming in every day that bear evidences of the grossest carelessness. Some of them are a disgrace to the concerns that send them out, and only under the most lax system of inspection could it be possible for them to get into the shipping room. No inspector who knows his business can be ignorant of the many things wrong, and the only explanation I can conceive of is that in the hurry to get cars out nobody cares much what sort of shape they are in as far as the little things are concerned. For, curiously enough, there is never anything very serious the matter—nothing that warrants sending the car or motor back to the factory.

"Imagine a car coming to us with three of the four dust caps off the wheels, and the fourth screwed on so carelessly that the threads were crossed! That actually happened only the other day. Another car had the rubber foot mat cut to go over the foot levers in such a bungling fashion that it wouldn't lay flat. We had to cut some more out of it to keep it from bulging up and setting crooked. Here's another little mistake," indicating the car he was working on. "This little rod is intended to act on this valve lifter, but, you see, it does not come within a quarter of an inch of it, and you can work the rod all you want and it won't have the slightest effect on the lifter. I could go on calling off the list of such things for half a day. But what's the use? We have complained to the makers, but they evidently don't take the matter seriously, for there is no improvement.

"It is going to be a very serious matter, I tell you. It costs us some money to put these things to rights, but that is not the worst of it. The time and care we spend on the cars is getting to be a mighty big item. Why, we don't dare to let a car go out to a customer until we have gone over it exhaustively, and even then there is danger of something developing after it has been run a few miles more than we have driven it.

"What makes me madder than anything else is the inexcusability of the whole thing. I know that they are rushed at the factories, endeavoring to fill the orders that have poured in, and I could overlook a few things caused by the rush. But there are so many of them, and such little things. The cars have to be inspected, so why not

inspect them right while about it? It wouldn't take much more time to do it right than to half do it, and the gain at this end would be something wonderful."

### How Mr. Cutting had his Car Delivered.

The Wanamaker establishment in this city has received its first 1903 Searchmont car—the first, that is, outside of the demonstration cars. It goes to R. Fulton Cutting, and will be delivered to him as soon as he returns to the city.

At the request of its owner the car was run over from the Searchmont factory at Searchmont, Pa., under its own power. His idea was to give it a good road test, and there is little doubt that he will be pleased when he learns the details of the trip. The start from Philadelphia was made bright and early on Sunday morning. It was just 4 a. m. when the City Hall was left in the rear, and dawn had not yet broken. At 9 o'clock, five hours later, the car drew up at the ferry at Jersey City, having made the run without a skip of a break. The ninety-odd miles of good and bad roads between the two cities was covered in splendid shape, the engine working as if it had been run for weeks.

The car is one of the regular 1903 models, Type VII. It has a two cylinder vertical motor, and a luxurious tonneau body, built high in the back in the manner now so much in vogue on the best foreign cars.

In Mr. Cutting's stable the car will replace another Searchmont, one of the early models.

### To Stop the Leaks.

An excellent method of repairing a leak in pipes or joints in the water cooling system of a gasoline car is to bind around the part leaking a length of string which has previously been soaked in oil. To make a satisfactory temporary repair by this method, the string should first be soaked in oil—boiled linseed for preference, if one happens to be in a locality where this can be obtained from a blacksmith or carpenter, or, failing this, thick lubricating oil—and then wind round the joint the string, keeping the coils as close together as possible. The start and finish of the coil should be some little distance on each side of the point at which the leak occurs. The winding should consist of two or three layers of string, if as much of this very useful material is at hand.

In case of a leak occurring in the tank, if the fracture is sufficiently large, some tow can be made by picking a piece of string, soaking it in oil and packing it into the joint by means of a chisel or a strong blade of a penknife. White lead, of course, is at all times preferable to oil, where procurable, and if a piece of tape can be used in conjunction with this a satisfactory and permanent repair can be effected.

Automobiles are multiplying so rapidly at Atlantic City, N. J., that a number of the larger hotels are erecting special buildings in which to store them.

# THE MOTORCYCLE MAGAZINE

A High-class Monthly

Profusely Illustrated

will make its appearance

June 1st, 1903

SUBSCRIPTION, \$1.00 per annum

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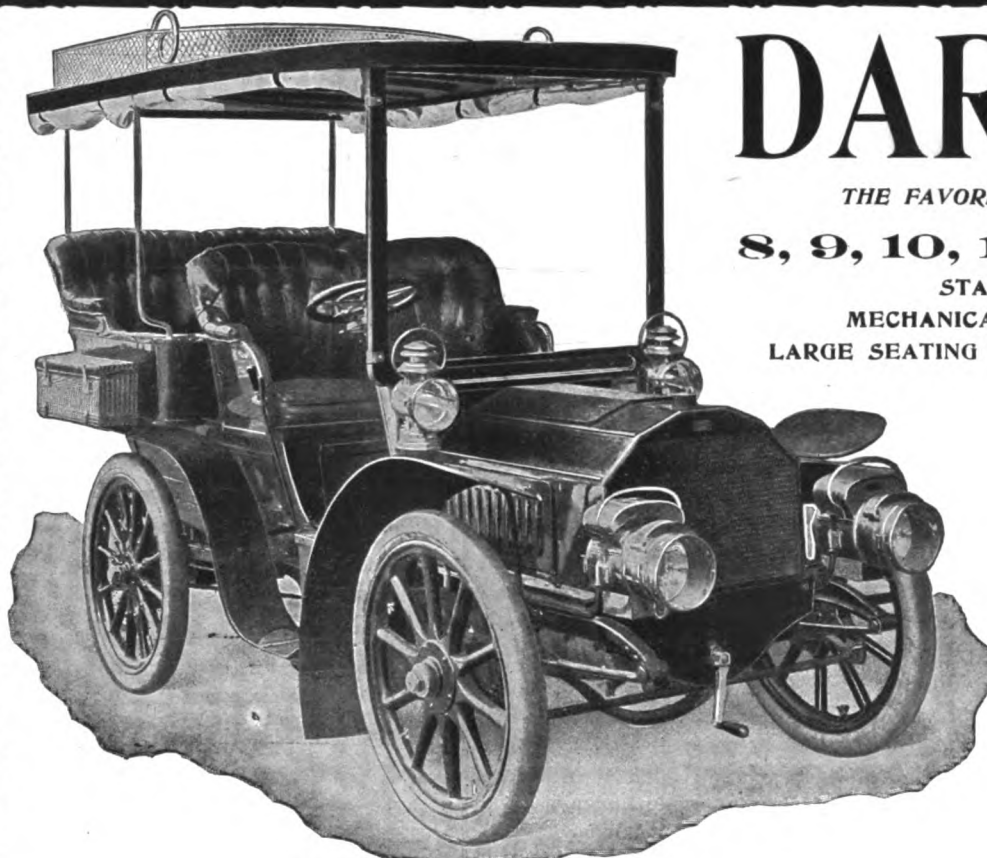
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Will you become  
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THE GOODMAN COMPANY

154 Nassau Street,

NEW YORK



20 H. P., 4 CYLINDERS, TOP DETACHABLE.

# DARRACQ

THE FAVORITE OF TWO CONTINENTS.

8, 9, 10, 12 and 20 H. P.

STARTS FROM SEAT.

MECHANICALLY OPERATED VALVES.

LARGE SEATING CAPACITY. LARGE WHEELS.

Noiseless,

No Vibration,

Luxuriously Appointed.

IMMEDIATE DELIVERY.

Eastern Agents

CLEVELAND ROADSTER.

**American Darracq  
Automobile Co.,**

Controlled by F. A. LA ROCHE CO.,

652-664 Hudson Street,

147 West 38th Street,

NEW YORK.

CHICAGO, 502 Wabash Avenue.

PHILADELPHIA. PITTSBURG. BOSTON.

TO SECURE THE GREATEST DEGREE OF

## COMFORT IN TRAVEL

ARRANGE TO TAKE ONE OF THE FAST TRAINS

of the

**MICHIGAN  
CENTRAL**

THE NIAGARA FALLS ROUTE

Through  
Sleeping Cars  
from

BOSTON,  
NEW YORK  
and BUFFALO  
to CHICAGO.

For rates and information  
call on local agents or write

W. H. UNDERWOOD,  
G. E. P. Agt., Buffalo.

O. W. RUGGLES,  
G. P. & T. Agt., Chicago.



**Not Interested in Cup Trials.**

Being mistaken for another man and put off the train at Buffalo when not desirous of it is an old story that was recalled by what happened to one poor mortal at the Garden City Hotel on Monday morning. About a hundred guests had turned in on Sunday night leaving calls for 4 a. m. in order that they might participate in the 4.30 breakfast and get out to witness the trials of the cup race candidates on the Westbury-Merrick course. In some way the clerk got mixed on the room numbers, and one of the guests who wanted to sleep late was made to get up at 4 a. m. in order to stop his telephone ringing. He yelled profanely to the office asking what they meant by calling him at that unearthly hour.

"Aren't you one of the automobilists?" queried the clerk.

"Automobilists! Hell, no!" screamed back the man who wanted to sleep.

It was conjectured by those who knew of the incident that one possible motor car buyer had been spoiled and a motorphobe made by that mistake of the clerk.

**The Darracq on "Duffy's Hill."**

Hills tell the tale of power and reliability, and the car that is able to climb them easily and as a matter of course is the one that is likely to give all around satisfaction.

Its ability to laugh at grades is one of the characteristics of the Darracq, and in proof of it the American Darracq Co. are pointing to the performance of one of their cars in this city last week. Carrying five persons—all men of substance, as their combined weight of 1,045 pounds shows—it went up "Duffy's Hill," in Lexington avenue between 102d and 103d streets, without a falter or a skip.

The car weighed 2,200 pounds, unloaded, or with its live cargo 3,245 pounds. The hill, which has attained quite a local reputation as a "pimple" of more than ordinary difficulty, is credited with having a grade of 16 per cent.

**"Crap," Ducky, Police.**

At a large uptown garage recently an interesting game of "crap" was in full swing. It was the middle of the afternoon, and matters were very quiet for the moment. There was the inevitable negro, two or three chauffeurs waiting to be called into service and some mechanics, the latter having just "happened along."

A ring had been formed in a retired corner of the building, and the click of the ivories as they were rolled on the floor mingled with the half suppressed exclamations of the players. Presently an addition was made to the group. A policeman in full uniform had thrust himself in an opening in the circle and was eyeing the dice with horror. The ducky was the first to catch sight of him. With mouth agape and the whites of his eyes rolling wildly he dropped the dice he was about to roll and looked for a way of escape. He was back against the

wall, however, and hemmed in on both sides. His actions attracted the attention of the others, and they looked up and met the stern gaze of the officer.

"The whole of yez is pinched," he exclaimed in a truculent tone that was belied by the twinkle in his eye. And as a smile spread over his face the players plucked up courage and went on with their game.

**"Dead Storage" not Liked.**

"Dead storage" is a term used to designate cars left on storage solely. Such cars are given storage room only. They receive no attention at the hands of the garage attendants, and are therefore much less profitable than the cars that are cleaned, lubricated, charged, etc., as well as stored. Few, if any, garages like "dead storage," and an overwhelming proportion of cars found in the metropolitan establishments are there on the combination plan.

**The Week's Exports.**

British Possessions in Africa—9 cases motor vehicles, \$4,200.

British Australia—3 cases motor vehicles, \$1,126; 6 cases motor machinery, \$150.

Dutch East Indies—2 cases motor vehicles, \$600.

Havre—1 case motor vehicles, \$1,500.

London—4 cases motor vehicles and material, \$7,079.

Liverpool—2 cases motor vehicles and machinery, \$2,800.

**SOME BARGAINS IN AUTOMOBILES.**

Here are a number of thoroughly good motor cars which offer a safe economy to men who want a better machine than they feel like buying brand-new at the spic-span price.

They will be delivered in first-class condition.

- 1 Wood's Stanhope, electric; new, without battery: \$900.
- 1 Searchmont Tonneau, Type V, \$1,500.
- 1 Searchmont, Type III, \$500.
- 1 Baker Stanhope, \$1,300.
- 1 Baker Runabout, \$700.
- 1 Royal Motor Cycle, \$100.
- 1 Searchmont, Type II, \$350.

We are also showing the following:

- Searchmont, Type VII, \$2,500.
- Searchmont, Type VI, \$2,000.
- Rambler, Model E, \$750.
- Studebaker Runabout, \$975.



SEARCHMONT TYPE VII.

See them at our Salesroom and Storage Station, 138-140 East Fifty-seventh Street

**John Wanamaker**



The pleasure of going when and where you wish safely, smoothly, silently, without elaborate preparation or tiresome interruption is characteristic of

**NATIONAL ELECTRIC VEHICLES**

Perfection of service due to extreme simplicity of construction. A child can operate a "National." Peculiarly the "ready" automobile for practical, every day, all-the-time use.

Write for catalogue showing wide variety of latest electric vehicles

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1400 E. 22d St., Indianapolis, Ind.

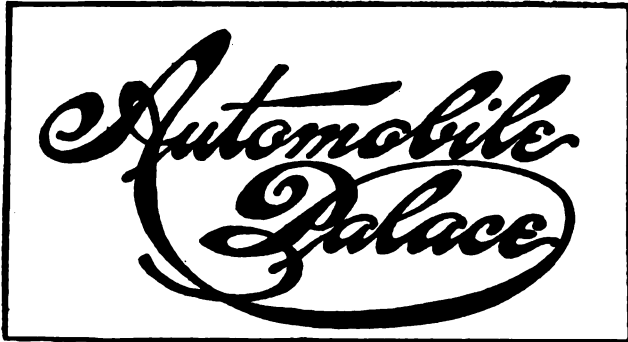


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INDIANAPOLIS, IND.

THE HOME OF RELIABLE CARS

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NO EXPERIMENTS SOLD.**

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DO YOU WANT TO BUY THE

# Best Automobile Wheels

MADE IN THE COUNTRY?

IF SO, YOU MUST APPLY  
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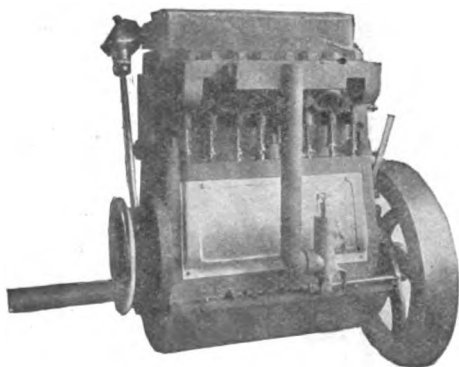
**NEW HAVEN CARRIAGE COMPANY,  
NEW HAVEN, CONN.**

*Every Wheel Guaranteed Exactly as Represented.*

**LIGHT. POWERFUL. RELIABLE.**

## FOR Gasolene Motors

**FOR TONNEAU AND EVERY  
OTHER STYLE VEHICLE.**



Write

**BUFFALO GASOLENE MOTOR CO.,**

9 Bradley Street, BUFFALO, N. Y., U. S. A.

EXHIBIT AUTOMOBILE SHOW.

EXHIBIT SPORTSMAN'S SHOW.

**STEADY. SPEEDY. ECONOMICAL.**





## The Week's Patents.

725,668. Governing Mechanism for Gas Engines. Leopold F. Burger, Anderson, Ind., assignor to Woolley Foundry & Machine Works, Anderson, Ind. Filed November 11, 1901. Serial No. 81,939. (No model.)

Claim—1. In a gas engine, the combination of a casing having independent air and fuel chambers each provided with inlet ports, a governing valve adapted to control said ports, and an independent fuel valve automatically operated to control the flow of fuel to the fuel chamber; substantially as specified.

725,669. Speed Governing Mechanism. Leopold F. Burger, Anderson, Ind., assignor to Woolley Foundry & Machine Works, Anderson, Ind. Filed March 27, 1902. Serial No. 100,242. (No model.)

Claim—1. In a speed governing mechanism, a shaft, a flywheel mounted upon said shaft and provided with a bearing eccentric thereto, a governor mechanism having weighted ends at opposite sides of said shaft and pivotally mounted in said bearing, a spring extended from the end of the governor opposite the pivot to said wheel, a driving pinion carried by said governor pivot, a sleeve rotatably mounted upon said shaft and provided with a gear meshing directly with said pinion, and means carried by said sleeve for transmitting motion to a reciprocating valve rod; substantially as specified.

725,675. Driving Mechanism for Self-Propelled Vehicles. Patrick J. Collins, Scranton, Pa., assignor to Richard J. Bourke, trustee, Scranton, Pa. Filed August 29, 1902. Serial No. 121,515. (No model.)

Claim—1. In an automatically propelled vehicle, the combination with a suitable driving power of a dynamo-electric machine comprising a hollow field frame having a central compartment and two side compartments, a generator armature in the central compartment and connected to said driving power, and armatures in the side compartments geared to the driving wheels of the vehicle.

725,700. Hydrocarbon Oil or Gas Engine. Ernest W. Graef, Brooklyn, N. Y., assignor of one-half to George A. Kay, Brooklyn, N. Y. Filed December 13, 1901. Serial No. 85,740. (No model.)

Claim—1. The combination of a cylinder, a piston, a shaft connected therewith, an injection valve, a pump having a pressure chamber in communication therewith,

means for causing the pump to maintain a constant pressure of fuel in said chamber, tripping means to suddenly open said valve, and devices interposed between the tripping means and the shaft to operate the former by the latter, said devices comprising means to regulate the amount of opening of the valve, substantially as described.

725,713. Motor Vehicle. Charles W. Hunt, West New Brighton, N. Y. Filed June 16, 1902. Serial No. 111,896. (No model.)

Claim—1. In a motor vehicle the combination of an axle, driving wheels, a reciprocating piston engine mounted directly on the axle, driving connections independent of the engine and between the engine and the driving wheels, and a supporting frame for said connections also mounted on the axle, substantially as described.

725,741. Fuel Feed Regulator for Explosive Engines. Charles A. Miller, Reading, Pa. Filed March 1, 1902. Serial No. 96,218. (No model.)

Claim—1. A vaporizer, comprising a feeding chamber, a float therein and a valve operated by said float, a mixing chamber communicating with the feeding chamber, and provided with an outlet, a positively driven shaft in said mixing chamber, a series of fans mounted on said shaft, a regulating valve between said chambers, a governor mounted on the revolving shaft, connections between said governor and valve for automatically operating the same and a needle valve adapted to open or close the passage between the chambers.

725,766. Vehicle. Harry M. Pope, Hartford, Conn. Filed August 11, 1900. Serial No. 26,565. (No model.)

Claim—1. In a running gear frame for vehicles, the combination with two reaches, the axles and a pair of spaced ears near each end of the axles between which extend the ends of the reaches; of a universal coupling at each connecting point, the same consisting of a tapered pin connecting the pair of ears and between them passing loosely through holes in the reach, bearing surfaces within the latter, and a ball within the reach between said surfaces and through and into which the pin fits tightly.

725,773. Rotating Field Magnet for Alternating Current Generators. Henry G. Reist, Schenectady, N. Y., assignor to General Electric Co., a corporation of New York. Filed October 18, 1901. Serial No. 79,143. (No model.)

Claim—1. In a dynamo-electric machine, a

spider having a rim flange provided with a web projecting outwardly in a plane of revolution.

725,789. Explosion engine. Louis F. Splitt, Layton Park, Wis. Filed July 16, 1900. Serial No. 23,736. (No model.)

Claim—1. In an explosion engine, the combination of an explosion chamber; an auxiliary compression chamber; a valved passage communicating between said chambers; pistons located in the chambers and connected with each other; means for supplying the compression chamber with both explosive and non-explosive gases; and mechanism, operated by the engine, for cutting off the supply of explosive gas at intervals, whereby the non-explosive gas is compressed and delivered to the explosion chamber to drive the piston by the residual heat of a preceding exploded charge.

725,911. Engine. William A. Alsterlund, Moline, Ill. Filed August 14, 1902. Serial No. 119,674. (No model.)

Claim—1. In an engine, the combination with the cylinder having a plurality of inlet ports, of a piston adapted to successively open and close communication between said ports and one side of the piston, and a valve adapted to admit steam through one or more of said ports, substantially as specified.

725,955. Foot Starter Mechanism for Automobile Engines. David F. Graham, Springfield, Mass., and Frank A. Fox, New York, N. Y., assignors, by mesne assignments, to the Graham-Fox Motor Company, New York, N. Y., a corporation of New York. Filed September 21, 1901. Serial No. 76,005. (No model.)

Claim—1. In a mechanism of the class set forth, the combination with the engine shaft, of lever mechanism for operatively turning said shaft, such mechanism consisting of an operating lever carrying a segmental gear, and a gear loosely mounted upon the engine shaft adapted to be engaged by said segmental gear when the operating lever is actuated, and thus serving to turn the shaft in one direction, means in connection with the gear for operatively engaging the shaft to prevent back turning of the same during the operation of said lever mechanism, and means carried by the segmental gear of the lever mechanism for retaining said non-back-turning means out of engagement with the shaft when said lever mechanism is in normal non-operative position, substantially as and for the purpose set forth.

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Our chains were fitted to 14 of 16 vehicles which won first-class certificates in the New York-Boston reliability contest. The majority of manufacturers equip their vehicles with our chains.

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AND OTHER WORK.

We are prepared to make estimates from drawings or models and guarantee first-class work.



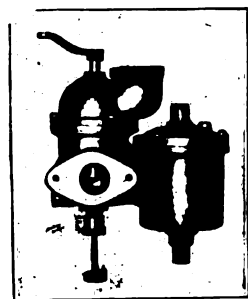
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We carry radiator discs, return bends and tube in stock for quick delivery. We make the best disk radiator and the only cellular cooler in the United States.

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### FLOAT FEED. ALUMINUM CASTINGS.

Will positively supply highly explosive mixture from any grade of gasoline. Get a good carburetor. Get ours. It will increase the power of your motor. Money back if not satisfactory. Write today.

NATIONAL AUTOMOBILE AND MOTOR COMPANY  
MILWAUKEE, WISCONSIN.

**This is the Age of the Specialist.**  
OUR SPECIALTY IS

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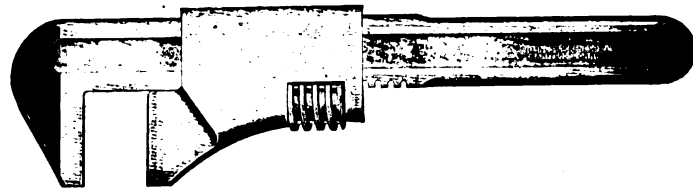
and all our energies are concentrated on making them well. Past experience in car, carriage and coach building and a thorough knowledge of automobile requirements fit us to produce the highest class work, stylish and substantial. Responsible concerns are invited to write for estimates.

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FACTORY:  
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## The B. & S. Adjustable Automobile Wrench IS WITHOUT A RIVAL.



THREE SIZES—10 in., 14 in. and 18 in. Case Harden Finish.  
SEE CIRCULAR A.

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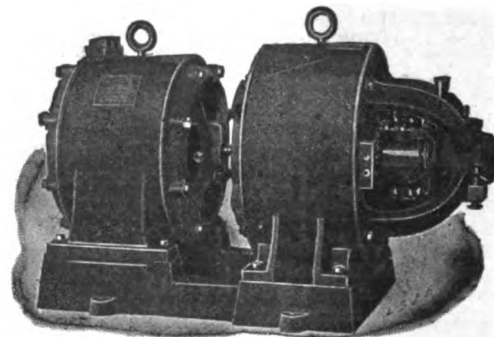
COLUMBIA RUNABOUT.

MODEL C. PACKARD, 12 H. P., WITH OR WITHOUT TOP.

*If interested, send for description of above  
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Shattuck's Automobile Emporium, 239 Columbus Ave., BOSTON, MASS.

## The Elwell-Parker Electric Co.



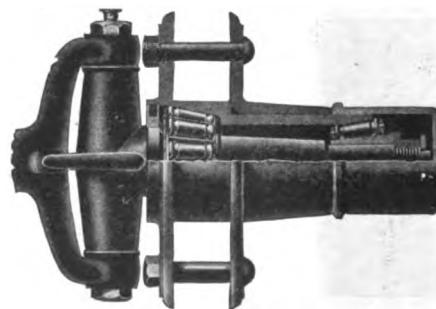
Converter for Charging Automobile Batteries from Alternating Current.

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ARE  
**WARRANTED  
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All sizes and styles of front  
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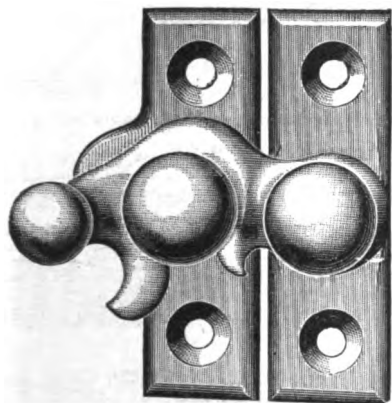
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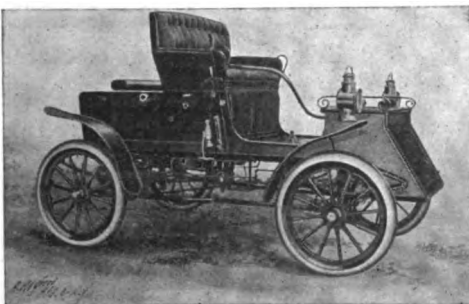


have any Ignition outfit  
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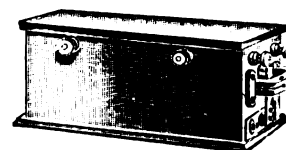
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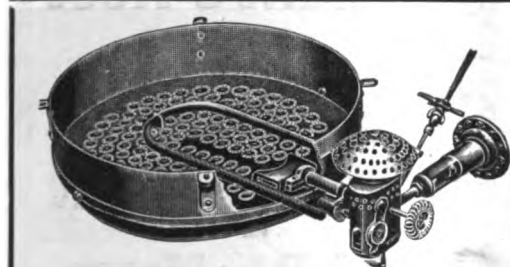
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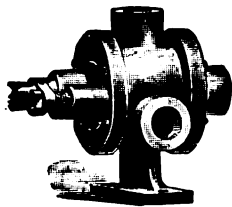
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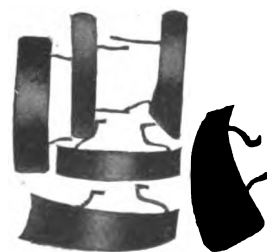
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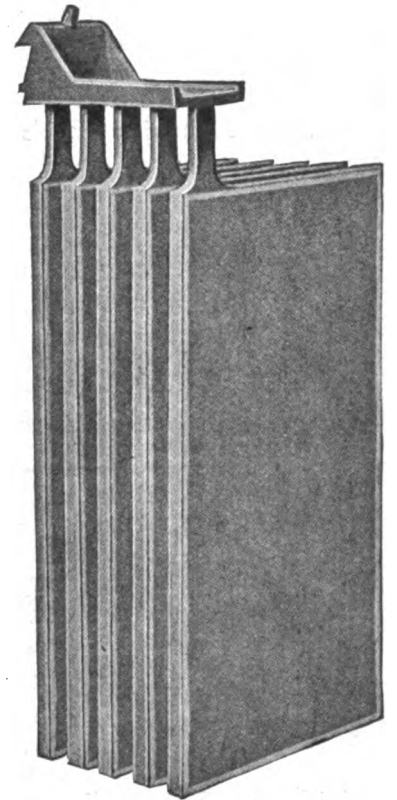
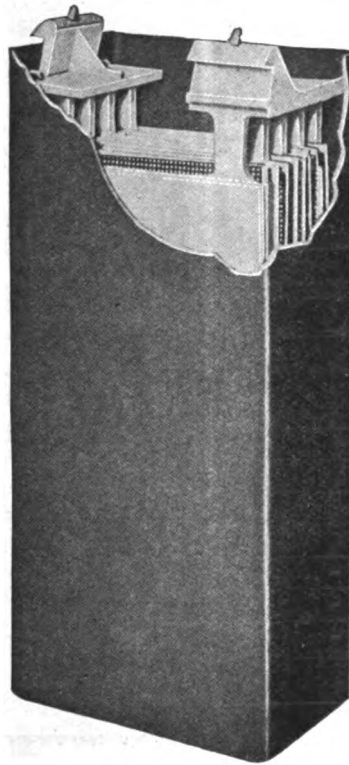
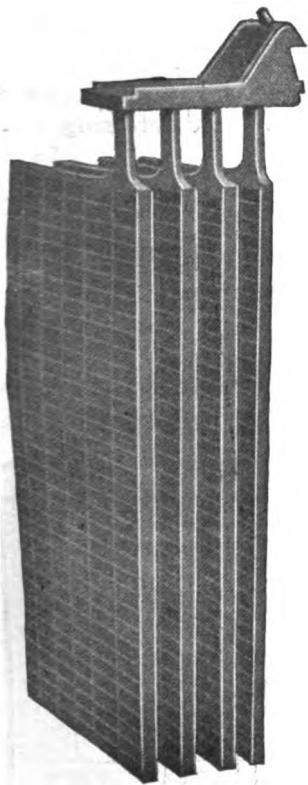
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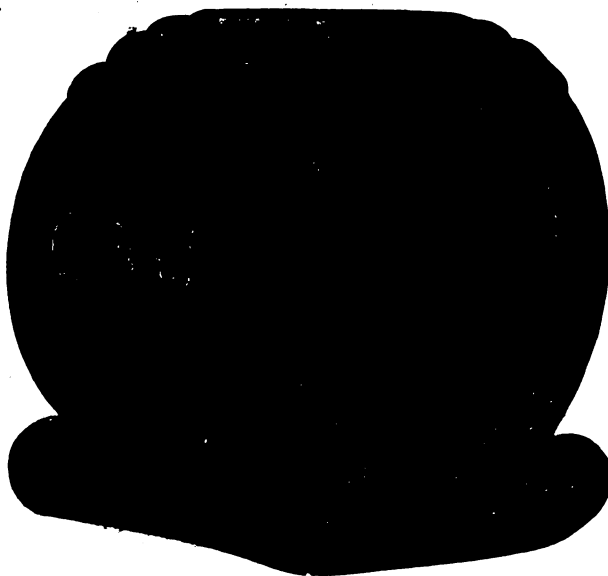
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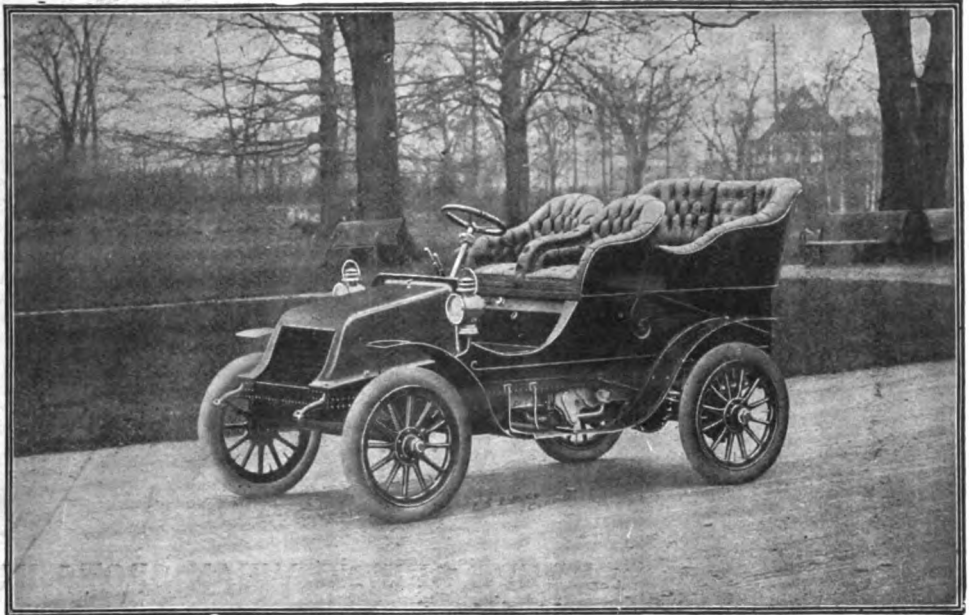


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in advising you to place your order at once if you are going to get a

# WINTON

So many folks are getting Winton 20 h. p. Touring Cars that somebody will surely have to wait. That somebody will be the man who trails in late with his order.



**PRICE, COMPLETE, \$2500**

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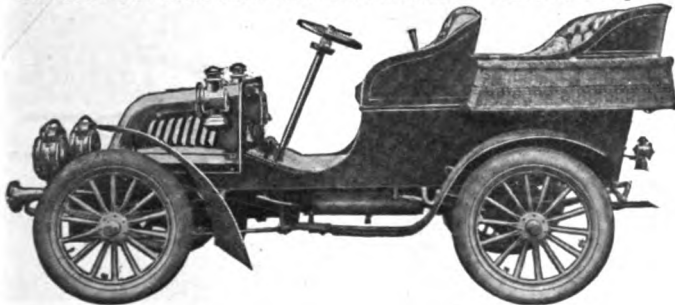
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Are Pre-eminent for Speed.  
Safety, Reliability and Economy.

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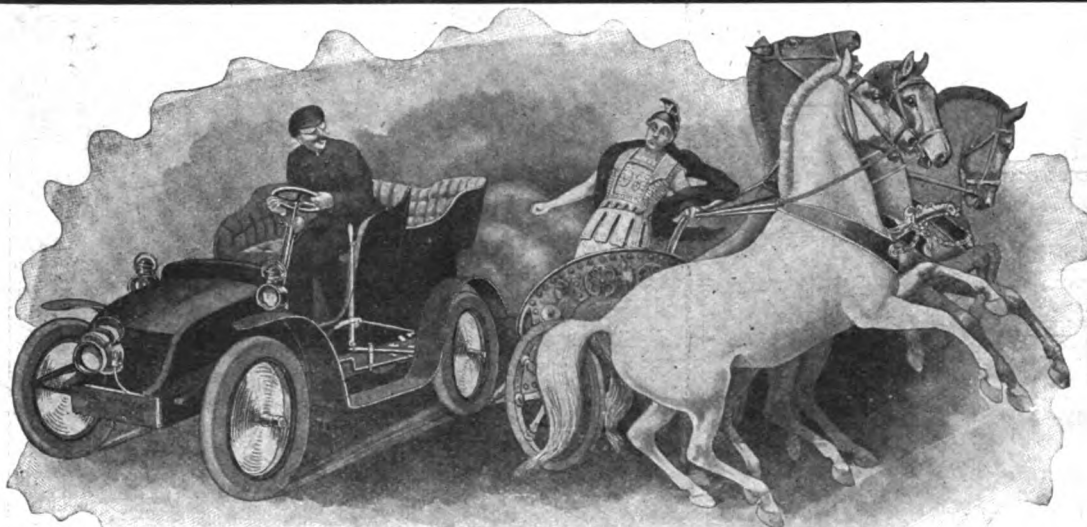
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ARTILLERY WOOD or WIRE.

**GET WITH US.**

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**Our 1903 Steam Cars are  
the Result of Unequalled  
Experience.**

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**Paris Exposition, 1900.**—The Locomobile awarded two medals.

**Exelberg Hill Climbing Contest, June 1901.**—Auspices Austrian Automobile Club.—The Locomobile wins first place and first prize.

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**500 Mile Endurance Run, New York to Buffalo.**—Auspices Automobile Club of America, Sept. 1901.—Locomobile wins First-Class Certificate.

**Glasgow Reliability Trials 535 Miles.**—Auspices Automobile Club of Great Britain, October, 1901.—Locomobile awarded gold medal—highest award.

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**Speed Trials, Coney Island Boulevard, November, 1901.**—The Locomobile wins the Gold Medal in its class.

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#### Some Conveniences and Features, 1903 Models.

Indestructible water gauge; Victor steam air pump, obviating all hand pumping and very useful for inflating tires; Victor steam water pump, a reliable auxiliary boiler feed; ejector for convenience in touring; thorough lubrication of engine from one central oil reservoir; positive automatic oil pump for cylinders; forced draft for use in windy weather; superheated steam; solid and substantial construction; fine workmanship and handsome finish throughout.

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Winner Everywhere,  
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**100 Miles Run—New York to Bridgeport**—Auspices Automobile Club of America—Locomobile wins three Non-stop Certificates, 100 per cent. Records.

**Staten Island Speed Trials, May, 1902.**—Auspices Automobile Club of America—Locomobile breaks World's Record, 1 mile, for steam cars.—Gold Medal.

**Chicago Auto Club, 100 Mile Test, August, 1902.**—Locomobile wins Non-Stop Certificate, 100 per cent. Record.

**650 Miles Reliability Trials**—Auspices Automobile Club of Great Britain, Sept. 1902.—Two Locomobiles won gold medals, highest award. Only American car to receive this honor.

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**Eagle Rock Hill, 1902 Contest.**—Open to all.—Again Locomobile makes fastest time and wins first prize.

The man  
able to  
make a

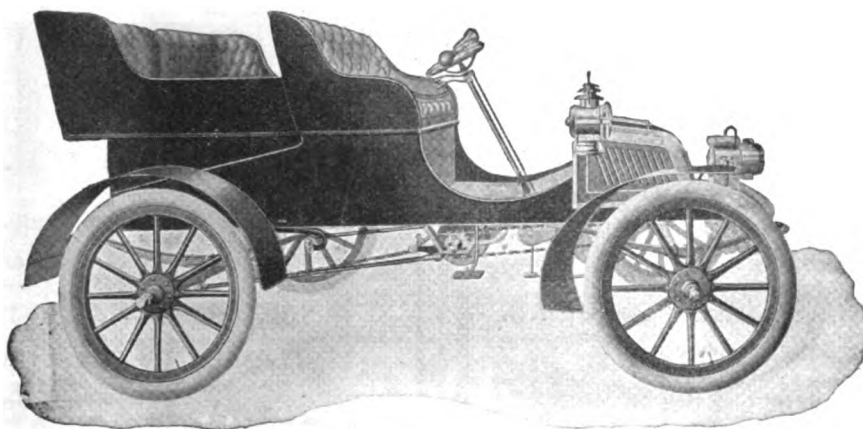
**MOTOR DO WITH  
TWO STROKES  
WHERE FOUR  
WERE BEFORE REQUIRED**

would seem akin  
to the benefactor  
who made

**TWO BLADES  
OF GRASS GROW  
WHERE BUT ONE  
CREW BEFORE.**

at any rate the **ELMORE MOTOR** is in that class  
and is applied only to the

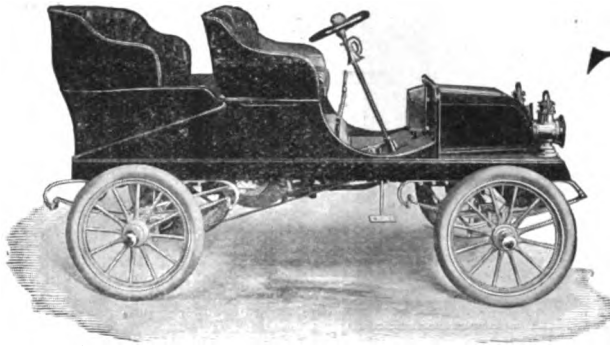
**\$800—ELMORE RUNABOUTS AND TOURING CARS—\$1400**



The vehicles themselves are like the motor—simple and as reliable as they are simple. They certainly merit your inquiry if simplicity and not complication appeals to you.

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It's Easy to See 



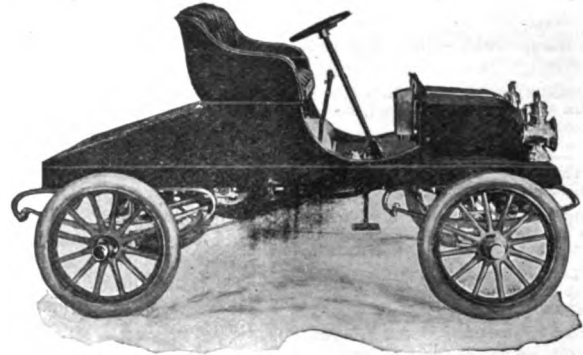
WITH TONNEAU ATTACHMENT.

Tonneau, giving extra seating capacity furnished if desired. This gives it all the advantages of a Touring Car. The 8 h. p. engine and perfect mechanism make it serviceable on any road. Write for catalog.

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Comfortable riding, dependable mechanism, ample power, easy steering and operating.



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## THE POPULAR GASOLENE CAR Century Tourist

IS ACKNOWLEDGED TO BE  
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Simple control—Free from complications—  
Unequaled in construction—Will run anywhere  
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Always reliable.

**BUILT ENTIRELY IN OUR OWN FACTORIES.**  
**PARTS NOT BOUGHT AND ASSEMBLED.**

If our Catalogue does not convince you,  
a demonstration will.

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WHETHER IT BE

## Runabout or Touring Car

the man who makes a purchase without giving heed to  
the claims and prices of the

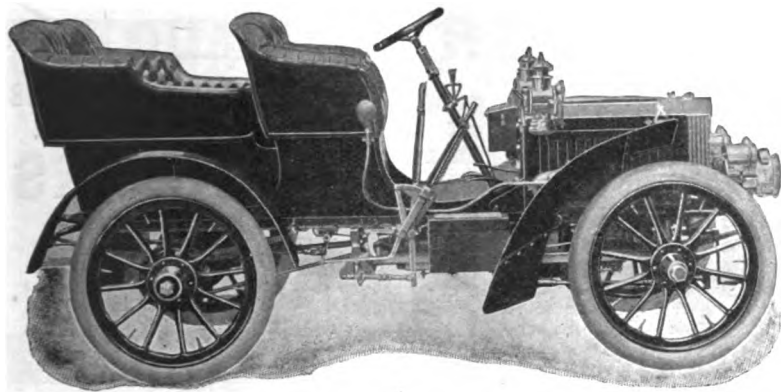
# CONRAD

is closing his mind to some  
hard, cold facts and figures.

IF YOU ARE NOT "GOING IT BLIND," WE WILL  
BE PLEASED TO PLACE THEM BEFORE YOU.

**Conrad Motor Carriage Co.,**

1413-1419 NIAGARA STREET, BUFFALO, N. Y.



THE 1903 PEERLESS TOURING CAR.

# THE PEERLESS

Winners  
at  
New York.

Winners  
at  
Boston.

**WINNERS EVERYWHERE.**

THE PEERLESS is one of three cars chosen to represent America in the Gordon-Bennett Race. THE PEERLESS won First and Second Places in the Boston Hill Climbing Contest. THE PEERLESS is winning First Place in popularity every day. Send for Catalogue.

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"I use my machine in all kinds of weather, rain or snow, hot or cold, and strange as it may seem I have no trouble to start my machine in cold weather; it seems to fire as readily when 15 below zero as it does at 90 in the shade, which is very satisfactory, when I see others giving five or six turns of crank before getting an explosion, and the Packard, my machine, invariably fires first compression. That is a very important feature for a physician, as we are obliged to stop so frequently.

My machine has had very hard usage, yet the working parts are as good to-day as they were two years ago. All in all I have had a world of comfort and pleasure out of my machine at a nominal cost for repairs of about what it costs to keep one horse and buggy same length of time."

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**\$2500.**

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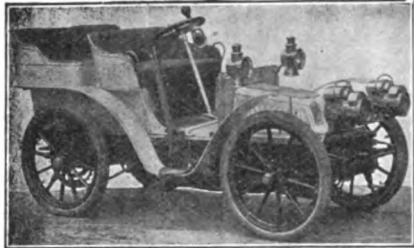


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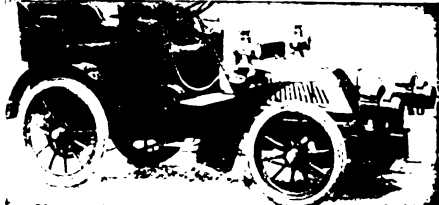
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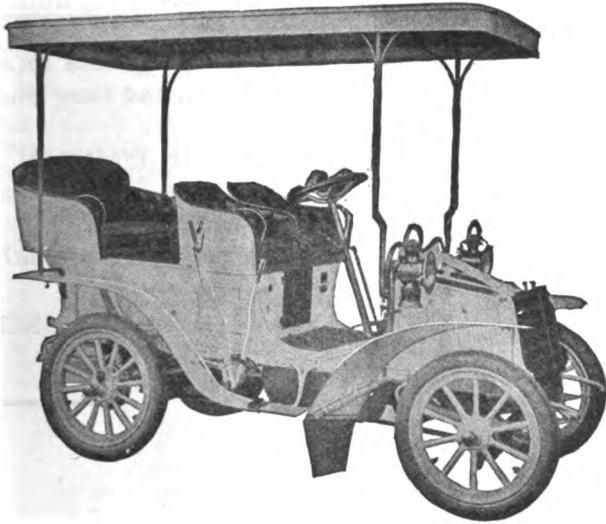
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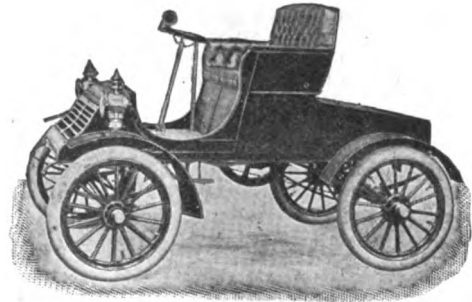
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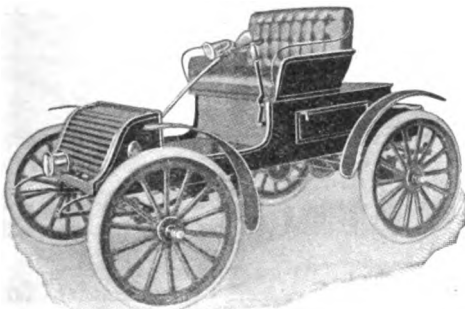
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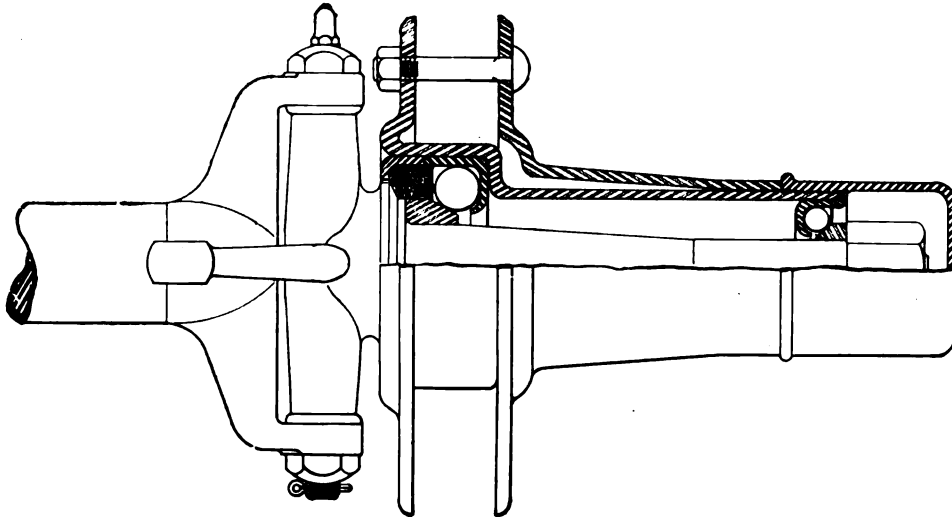
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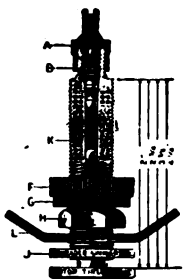
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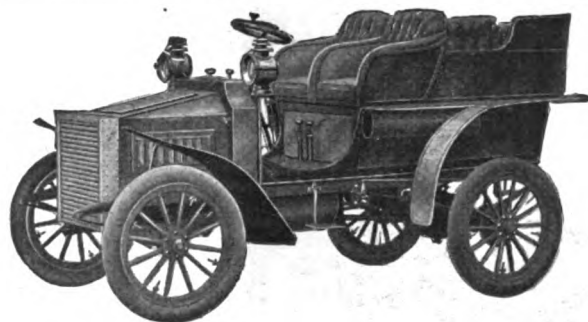
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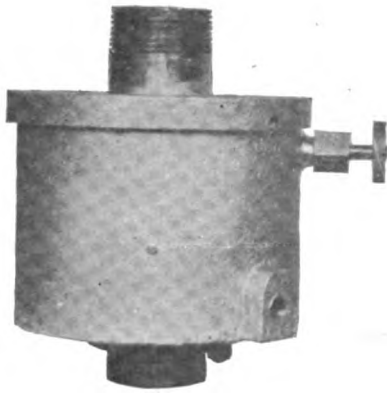
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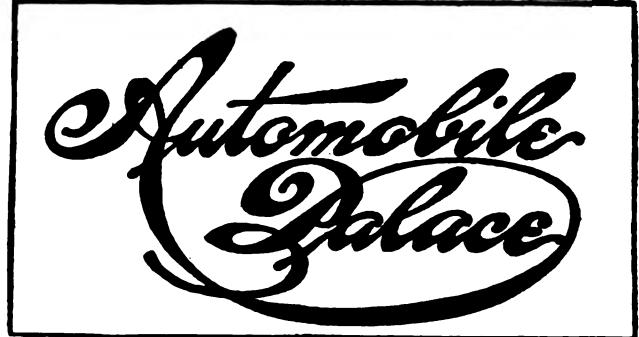
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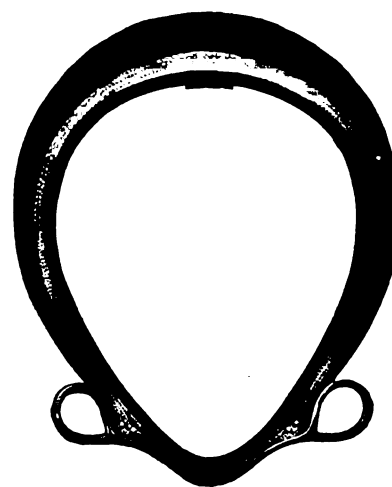
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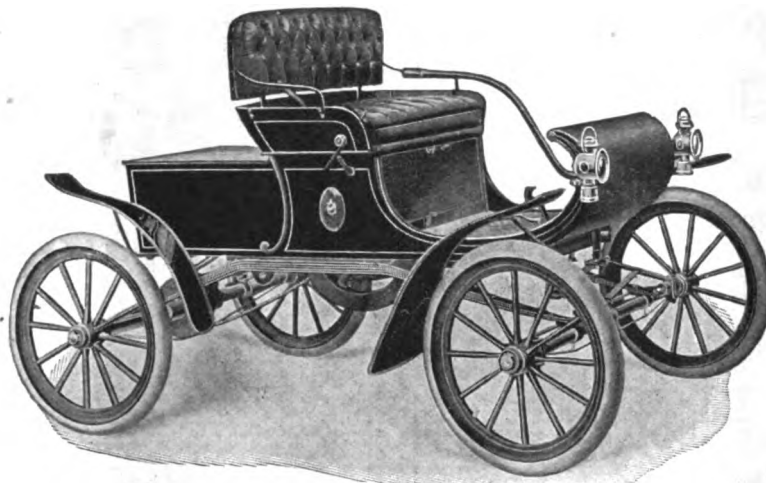
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AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, May 7, 1903.

No. 6

## STRADDLED

**Automobile Club Passes a Compromise Resolution on Bailey Bill—Full Story of an Interesting Meeting Swayed by W. C. Whitney.**

Passive antagonism is the attitude decided upon by the members to be maintained by the Automobile Club of America toward the Bailey-Doughty bill while it is pending signature by Governor Odell of New York. This is a decided change of front from that previously shown, but it is not a complete reversal.

By straddling the horns of its dilemma the club has managed to avoid a goring. The president and the law committee have not been censured; neither have they been commended. Their action of indorsing the Bailey bill in the name of the club has not been specifically condemned, and a vote of confidence has been extended to the president and the law committee; but what they did at Albany during the winter was completely upset by a unanimous vote that the sentiment of the members is strongly opposed to the bill. With this the members and the executives have decided to rest, it having been resolved that no appearance of the club should be made at the hearing before the Governor to urge the veto of the bill.

So, to the credit of the automobilists in New York State generally, there was no division of opinion in their ranks when they appeared at the hearing in Albany yesterday. The action taken by the Automobile Club of America gave the clubs and all other organizations a solid front of opposition in sentiment, with all but the A. C. A. represented in active opposition. This removed the possibility of the Governor signing the bill on the plea of the automobilists being divided among themselves, with some in favor of having the measure made a law.

The change of front on the part of the A. C. A. was the outcome of the special meeting of members called for the discussion of the situation last Saturday night. The straddle effected was voted for unanimously, and there was a feeling of relief all

around, as if a crisis had been passed. There was a midnight luncheon in the grill room after the meeting, at which there was every indication that harmony had been restored. The opponents of the bill, whose resentment of the action taken by the president and governors in approving of it in the name of the club threatened disruption in the organization, were appeased by the preamble to the resolution adopted. While this was in a way a "throw down" for the president and law committee and governors, their fall was broken by the adoption of a vote of confidence, and they were further mollified by the resolution that the club should not demonstratively vitiate their action by making any protest to the Governor or taking any further action. The straddle was worded as follows:

"Whereas, The sentiment of the Automobile Club of America is strongly opposed to the Bailey bill now pending before Governor Odell; and

"Whereas, The said bill is a measure most prejudicial to the interests of the automobilists of the State of New York;

"Resolved, That in view of the attitude which the club has hitherto taken upon the subject no appearance be made by the club before the Governor with regard to the bill."

This was a compromise effected upon a motion made by Percy Owen that the foregoing preamble be adopted in connection with this

"Resolved, That a committee be elected at resolution: this meeting to represent the Automobile Club of America at the hearing to be given at Albany May 6, and strenuously oppose the signing of the bill by Governor Odell, and that a copy of this resolution be forwarded to Governor Odell."

It was William C. Whitney who moved to amend by substituting the resolution of passiveness for that of action, and Percy Owen obligingly withdrew the resolution from his motion and accepted the substitute.

Although President Albert R. Shattuck proceeded in habitual fashion and attempted to dominate the meeting, it was William C. Whitney who dominated it. He engaged a special train to take him to New York to attend the meeting, and arrived there accompanied by his secretary, with a pile of statute books. He was the most aggressive speaker against the bill, and yet he was the one to speak in most conciliatory

(Continued on next page.)

## IN THE BALANCE

**Gov. Odell Hears Both Sides of Bailey Bill and Its Fate Now Rests With Him—Paid Counsel Magnify Matters.**

All that eleventh-hour effort can do to prevent the enactment of the Bailey bill has been done. The oral artillery of its opponents was trained on Governor Odell in Albany yesterday afternoon, and though the Governor listened patiently, he gave small sign of his intentions, and these signs were variously interpreted.

Those who appeared in favor of the bill were Congressman Scudder representing the Long Island motorphobe association that drew the bill; former Senator Cocks, Senator Bailey, who introduced the bill, and J. L. Brower and Cyrus Clark, of the West Side Association, of New York city.

Among the opponents of the bill present were Delancy Nicoll and Abraham Gruber, of New York; Professor C. T. Terry, of Columbia Law School; M. J. Budlong, president of the National Association of Automobile Manufacturers; C. Andrade, Percy Owen, president of the New York Automobile Trade Association; State Senator Hill, O. A. Quayle, C. M. Page and C. M. Hyatt, of Albany; S. C. Tallman, of Auburn; C. A. Benjamin, H. W. Smith, president of the New York State Association of Automobile Clubs; F. H. Elliott, John Quigley and H. Walters, of Syracuse; Isaac B. Potter, president of the A. M. L.; Charles Clifton, G. S. Metcalfe, J. S. Satterfield and Dr. Lee H. Smith, of Buffalo.

Messrs. Nicoll, Gruber and Terry were the paid counsel of the N. A. A. M., and the first two, particularly, "laid it on thick." Nicoll said the enactment of the law meant the ruin of the industry, and magnified things generally. He characterized the act as "unjust and abusive," and made the point that existing laws were sufficient for all purposes. Gruber tried to be funny, but with doubtful success. Mr. Terry termed the law "tyrannical." Senator Hill and Messrs. Satterfield, Potter and H. W. Smith also spoke in opposition.

Mr. Scudder was, of course, the chief speaker for the bill.

"If these gentlemen who run automobiles do not intend to violate the law, why do they invest in machines capable of making sixty and seventy miles an hour," he asked dramatically. He characterized the existing Cocks law as a "gold brick," and presented a list of accidents which he said had occurred on Long Island. Mr. Brower, in his usual sing song tone, also chimed in.

The Governor gave until next Wednesday for the filing of briefs.

## STRADDLED

(Continued from preceding page.)

manner on behalf of the president and other officials who had found themselves in a position where they felt forced to agree to a compromise that was found later to be displeasing in the majority of their constituents. It was Mr. Whitney who first suggested a vote of confidence in the president and law committee, which was made by Allen H. Whitney and carried. Mr. Whitney breathed at the same time the spirit of harmony within the club, and determined denunciation of the Bailey bill and this spirit prevailed. It was generally agreed that the best possible solution had been found.

Several things were demonstrated by this most interesting meeting, which had a larger attendance than any other ever held by the club. One was that the members can be gotten out to vote when there is a matter of moment to be decided, and that they are not willing to be completely dominated by any one man or clique. Another thing emphatically shown is that President Shattuck and the governors and committees have the earnest good will and support of the club and that Mr. Shattuck is still pre-eminently the most influential individual factor in its management. No new leader or man with leadership possibilities was developed by the flurry of opposition, unless Mr. Whitney could be considered as a possibility for the presidency. The faction in favor of censuring the executives, or of at least emphatically repudiating their actions were completely carried away before the suave, habitual assumption of autocracy by Mr. Shattuck.

The meeting was called by him in response to the compelling demand of fifteen active members as provided for by the constitution. He announced the purpose of the meeting and the method of its call. Did he then say: "Gentlemen, what is your pleasure? Is there any motion?" No; instead, he proceeded to have presented to the members the explanations of the law committee, and their case in full, although it had been previously exploited by a printed "brief" sent by the law committee to all of the members. Not a motion was before the meeting, yet not one of the "insurgent" element arose to a point of order, although a written set of preambles and resolutions had been previously prepared. Eight or ten speeches were made before a motion was before the house, the proceedings being carried along smoothly by the overawing dignity and confidence of the presiding officer. Parliamentary usage was set at naught. It was a gentlemen's court, and Mr. Shattuck was the leading gentleman.

One other result of the whole incident seems to be that the managers of the club have realized how worse than folly it is in this country to affect English exclusiveness and attempt to move privately, by snubbing newspaper men when dealing with affairs of public concern. This peculiarly Shattuckian policy has been made repeatedly

ridiculous by premature publication of the private plans, so that "secret," mentioned in connection with the name of the unquestionably able and affable president is taken in a Pickwickian sense. That President Shattuck has realized the error of the policy of "I have nothing to say" and "It is private business" is indicated by the fact that the meeting of last Saturday night was at the eleventh hour thrown open to the press.

The stirring up the club has had over this matter has probably been wholesome, but it has not brought into view new material for another administration.

There were just about 100 members present when President Shattuck, who had postponed a trip to Europe in order to be present, called the meeting to order. It had been previously announced that "members only" would be admitted to the meeting and that the press would be excluded. Mr. Shattuck announced, however, that he had consulted with the governors just before the meeting and as a result had invited the reporters into the meeting. He then explained the purpose of the meeting and called upon H. R. Winthrop, chairman of the Law Committee, to speak. Mr. Winthrop said he had been out of town during the negotiations and that Judge James C. Church, Surrogate of Kings County, had been the working member of the Law Committee in the compromise effected with the motorphobes of Long Island. President Shattuck then called upon Judge Church to continue the argument for the defence. Judge Church went over all the points of the bill, substantially as they were presented in the "brief" sent out by the Law Committee last Friday and as outlined in *The Motor World* last week. Judge Church had maps of Westchester, Queens and Nassau counties, on which he pointed out the territory where speed is now restricted to eight miles an hour, but where he claimed it will be opened under the new law. Practically nothing on the side of the Law Committee was brought out that is not contained in the "brief" sent to members, and as this will be interesting in the event of the bill being signed, as is considered to be probable, it is here presented as the best summary of the case for President Shattuck and the Law Committee.

The "brief" tells how negotiations for a compromise bill were begun with the Long Island Protective Association last January and how they were terminated because the Long Islanders insisted upon a licensing provision and the Long Islanders had a bill of their own containing such a provision introduced into the Legislature in March. Concerning the situation at this time, the "brief" says:

"A meeting of the Law Committee of the club was called to consider this bill, at which there were present Judge Church, Mr. Niles and Mr. Shattuck. They decided as there was to be a hearing within two days at Albany on the bill above referred to, that Messrs. Church and Shattuck (Mr. Niles having another engagement) should see Mr.

Scudder and try and effect a compromise. An interview was had with Mr. Scudder, and he and your committee agreed by 11 o'clock that night upon the present compromise bill, known as the Doughty-Bailey bill, which was substituted for the one then pending in the Legislature. Your committee strenuously opposed every objectionable feature in the proposed bill and conceded only such points as were absolutely necessary to prevent an abrupt termination of the conference and a return of the Protective Association to its original bill. While this bill preserves many rights and privileges it also contains some objectionable provisions which, in the opinion of the committee, it was necessary to consent to."

The "brief" then sums up the bills as follows:

## ADVANTAGES.

"First.—Speed. There is no restriction whatever as to speed unless the local authorities pass an ordinance governing the same. In that event speed cannot be reduced below—

"Eight miles per hour in the closely built up portions of cities, except that park departments may reduce this rate;

"Fifteen miles per hour in the suburbs of cities where the houses are 100 feet apart;

"Twenty miles per hour in the open country.

"Second.—The provision for putting up signs 'Slow down to eight miles' within half a mile of a postoffice or at the limits of a built up portion of a town is, in one respect, an advantage as it renders the setting of police traps impossible without giving notice of where the speed must be reduced. A trap is now frequently set at the outskirts of a village or city where it looks like open country and automobilists arrested because they supposed they had the right to exceed eight miles per hour.

"Third.—It allows supervisors to set aside a road for speed tests.

"Fourth.—The registration by the Secretary of State is the same as under the present law, except that numbers instead of initials must be carried.

"Fifth.—The Cocks law is repealed.

"Sixth.—At the time legislation concerning automobiles was first had in this State, very careful provision was made to prevent local authorities from passing ordinances or regulations which would reduce the rate of speed below a certain rate fixed in the general law. This advantageous provision has been retained in the Doughty-Bailey bill.

"A town to avail itself of this bill must erect signs. If it does not erect them and maintain them the reduction of speed is not operative. Under the Cocks law speed must be reduced in incorporated villages and cities although we do not know where the village limits are.

## DISADVANTAGES.

"First.—An automobile must slow down to eight miles an hour in passing a person driving a horse, driving a domestic animal, a foot passenger walking in the roadway, or on crossing an intersecting main highway. One of the frequent causes of accidents is the passing of horses and foot passengers at a high rate of speed. It is, therefore, not a great hardship to require that they be passed slowly. It has been stated that this provision of the law applies to sheep, dogs, pigeons, etc., which are astray in the road—that they are domestic animals—but this is not so, for the domestic animal must be driven. It has been claimed that this statute would prohibit an automobile from passing in the same direction a person riding or driving a horse if the horse were going at the

rate of speed of eight miles per hour. This was not the intention in drafting this section, and we do not think it would be so construed. In the event of this becoming a statute, it will be a very simple matter for the Law Committee to have a test case which will definitely settle the exact provisions of this section.

"Second.—The bill provides that public schools between certain hours are not to be passed at a greater rate of speed than eight miles an hour, or churches on Sunday during the hours of service at a greater rate of speed than ten miles an hour. These buildings are usually in cities and villages and this provision is no hardship.

"Third.—It is provided that local authorities may place signs 'Slow down to eight miles' within half a mile of a postoffice, and that they may extend the radius of these signs beyond the half mile up to the limit of the built up portion of the town, and that between these signs a speed exceeding eight miles an hour shall not be permitted. It is not believed that local authorities will act unfairly in placing these signs. If they do, they can be forced to place them as required by law. It must not be forgotten that under the provisions of the Cocks law the speed in all incorporated villages was arbitrarily restricted to eight miles per hour irrespective of whether the highway was closely built upon or not, and that in localities where the villages were closely located together, the speed was practically limited to eight miles per hour—an instance of this is shown in Westchester County—and that in such places this provision will actually be a benefit to the automobilist. It has been claimed that these signs would render automobilism on the north shore of Long Island impossible because of the nearness together of the post-offices. A map has been prepared and is at the club showing that this is not so, and that only in a few cases will these signs be unduly restrictive.

"Fourth.—A motor must be stopped on request. This is not an unreasonable provision.

"Fifth.—In addition to owners registering, mechanics working for hire must register with the Secretary of State and receive a certificate. If either transgress the law their certificate is suspended. If they are convicted four times of violating a speed ordinance, they are barred and disqualified from receiving a license.

"Sixth.—Penalties. First offence not exceeding \$50. Second offence not less than \$50 nor exceeding \$100 or imprisonment not exceeding thirty days, or both. For third offence imprisonment not exceeding thirty days and a fine of not less than \$100 nor exceeding \$250. While the Doughty-Bailey bill makes the imprisonment mandatory upon a third conviction, yet the term of imprisonment is limited to thirty days, whereas under the present Cocks law for a second offence an automobilist may be sent to jail for six months. If there are any extenuating circumstances which would justify a judge upon a third conviction in not imposing heavy punishment, he has the authority to suspend the sentence entirely.

"Before the present bill is condemned it is suggested that the automobile laws of other countries should be compared:

	City.	Country.
France .....	12½	18½
Germany (Berlin) .....	9	15
Italy .....	9 4-10	15 6-10
England .....	12	12
New Jersey .....	8 and 10	20
Connecticut .....	12	15
Massachusetts .....	10	15
New York .....	8 and 15	15

"\*Lively horse trot. †On straight roads may be suitably increased. ‡Not less than 20.

In reply to the appeal of Judge Church at the meeting on Saturday night, Percy Owen obtained permission for the reading of a response in the form of a brief drawn up by W. D. Guthrie.

Mr. Guthrie contended that the bill does not repeal the Cocks law in that part of it which restricts the speed of automobiles in the open country. Anent the placing of signboards half a mile from postoffices and the privilege bestowed upon village authorities, he said that the law gives power to the local authorities to extend the signs to a greater distance than half a mile when in their judgment it is necessary to do so.

This leaves it to the judgment of town and village authorities, and it is the custom of the courts, he said, not to interfere in the action of village authorities when the statutes give them discretion. The contention of Judge Church that a judge need not send an offender to jail after a third offence, but might suspend sentence, is a very slender thread upon which to depend for relief from a drastic law.

As to the setting of traps, the Guthrie brief claimed that the new law would make it easy for the country constables because all they would need do would be for one to drive along the road with a horse at just eight miles an hour and have another driving ahead to arrest every automobilist who passed the horse and carriage; or they could have a man walking on the highway in the open country in front of a measured distance and timing trap.

The provision making speed tests on the road possible, he said, amounted to nothing, and he doubted its constitutionality. In all, he said, it was the most stringent anti-automobile law ever passed anywhere, and the most restrictive of individual liberty.

W. W. Niles, of the Law Committee, said that the pernicious character of the bill had been greatly exaggerated and that in a few weeks every one would be wondering what had caused the stampede. He said that the bill would surely be signed, as Governor Odell was known to have an animosity toward automobilists. The Governor had called the bill out of committee and had insisted upon its being passed. He hoped that the action of the Law Committee would be indorsed.

Then it was that William C. Whitney spoke. He walked to the front of the President's desk, and, after receiving a couple of law books from his secretary, said:

"I am sorry the issue is being framed as it is. I know what a thankless position is that of President. I will vote for a vote of confidence if that be the issue, but it is not. I disagree entirely with the view of Judge Church. If this bill becomes a law and is enforced I will join with those who will not own an automobile. Under this statute I cannot own one without danger of being adjudged a criminal. I will indorse the officers, but not until I have given my views on the bill.

"The Bailey bill does not repeal the Cocks

law. It, as part of the Penal Code, will remain in force. This limits speed in cities to eight miles an hour, and in the country to twenty miles an hour. If no ordinances are passed by municipal, village or county authorities giving a more liberal speed limit, then you have gained nothing by the Bailey bill, for the Penal Code is still in force.

"It is claimed that concessions have raised the limit in the suburbs of cities to fifteen miles an hour. Not so, unless new ordinances are passed. In fact, the suggestion that we gain anything at all by the Bailey bill is not correct.

"When you examine its clauses you will see that additional restrictions are imposed. They will, in effect, reduce speed to eight miles an hour instead of raising it.

"They tell us we cannot be caught in time traps, but we can be 'spotted' by hired 'spotters' on every highway, for you cannot pass a man in the highway at faster than eight miles an hour. How far out can the authorities post these signs? It is plainly left to the discretion of the local authorities as to what they consider 'built up' portions of the town. No court can upset their placing of the signs.

"The vicious part of this act has not been referred to in former arguments. It makes a violation of any of its provisions a criminal act. If an automobilist's lights go out and he proceed he may be adjudged a criminal.

"It goes further than this and makes a man a criminal subject to imprisonment on a third offence if he violates any ordinance a town or village may pass relating to automobiles. There is not its like on the statutes of any State.

"...we are put in the criminal classes, mind you. Common councils can make any laws they please and make us criminals if we violate them, and that is the reason why I would not own an automobile if the Bailey bill becomes a law."

H. S. Chapin then proposed as a solution of the difficulty that matters be left in statu quo and that the club agree to make test cases and fight out the disputed points of the bill in court.

Colgate Hoyt then said he was a living example of test case, because he was fighting the Cocks law in court, and if the Bailey bill had been in force he was sure he would be in jail. He gave a humorous account of his several arrests and said that the Nassau County officials were not the benign sort that some seemed to think, and that they could be depended upon to take every advantage of the new law to persecute automobilists.

J. B. Dill, of the Law Committee, appealed to the club to uphold the President and said that the strongest argument to influence the Governor to sign the bill would be to let it be known that the Automobile Club wanted it vetoed, because the Governor is prejudiced against automobiles.

W. E. Scarritt said that he hoped the bill would be vetoed, but that he was opposed to doing anything to discredit the accredited agents of the club.

A. H. Whiting then moved that a vote of confidence be given to the President and the Law Committee. This was carried, and Percy Owen next introduced his resolution, which was quickly amended and adopted. Adjournment followed.





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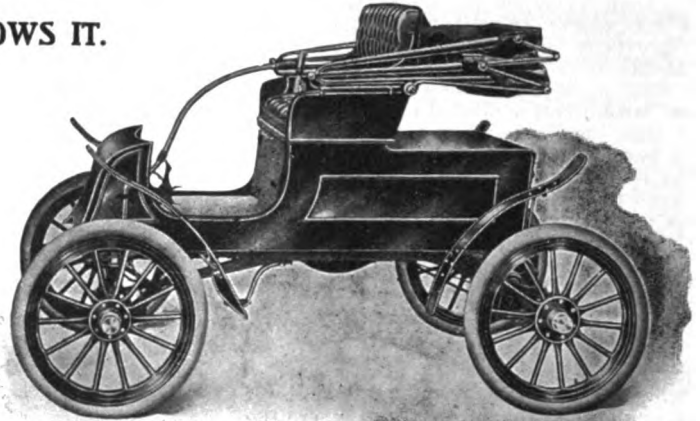
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### Sacrificed on the Altar of Speed.

Above all others, the lesson taught by the events of the last fortnight in New York which most sharply stands forth in relief is the folly and shame of compromise, or of any attempt at it, with the unreasoning forces of the enemy.

What a sight for gods and men has been that of the pioneer advocates of the latest and greatest means of personal transportation seeking to temporize with the powers of prejudice that can only jar but cannot stay the wheels of progress—to see men who know that they are the advance guard of a higher civilization offer to accept in meekness half of the whole loaf that is their birthright, and to see them in humiliating passiveness crane forth the neck to accept the yoke of obloquy that ignorance seeks to place upon every incarnation of the spirit of progress.

And alack! How futile has been the weakling willingness to compromise!

How better, ten thousand times, it would have been to have spurned all offers of partial concessions and demanded nothing less than the full justice of an untrammelled use of the highway that is an inalienable right. What if the fight had been lost? The cause would not have died. If defeated, would the consequences have been any worse in the form of unjust legislation that they have been after a grovelling acceptance from the hand of the foe of a little and quite insufficient loosening of the fetters? What a mockery of manhood has the whole farce been. How nobler it would have been to have gone down with colors flying than to have submissively hauled them down, only to be sunk while flying the pirate's flag hoisted in a hopeless plea for mercy!

To look back upon what has been done by its advocates, it well might be thought that there is lack of faith in the automobile having come to stay. If it is here to stay, there is not, there never has been, need to accept the burdens that have been laid upon its users. The right, the truth, has been upon the side of the motor wagon from the first. Its mischief making has been exaggerated; its damage less than that done by horse or railroad. Knowing this, how unmanly not to fight it out, with backs against the wall of right and equity. This has been the stand urged by the Motor World from the beginning, and it now has been amply vindicated by the history of the Bailey bill.

What need was there of acquiescing to a license law in New York State in order for the misnamed Automobile Club of America to make a test case? That the use of the roads is an inalienable right without a license tax is something that appeals as an axiom to every American. If the club was "of America," there was the law of license in Chicago, in force more than a year ago, and later the "model" New Jersey law, for it to make its test upon. If it was, after all, only a New York Club, then there was work in these laws for the lethargic American Automobile Association. In the laws in force outside of New York State there is work for the national organization now. If license taxes for highway privileges are unconstitutional, why should they be endured? If they are constitutional, then in heaven's name let appeal be made to Congress to remove the blight.

How tardy was the concerted effort to prevent the Bailey bill becoming law! To ask for a veto is an eleventh hour awakening that deserves little reward.

The most puzzling part of it all is to find what were the articles of barter between the apologists of the A. C. A. and the Highway Protective Association. What did the automobile representatives get? A study of the "brief" prepared by the law committee suggests inevitably the conclusion that speed was the great desideratum in the minds of that committee. To get unlimited speed in the country; to get a higher limit in the suburbs, and to have the minimum restriction apply to a small territory, seems to have been the object most sought, and for which every sort of concession was made. Yet speed privileges on the rural highways appeal as something of paramount importance to about only one-fourth of the users of motor vehicles. It would have been more seemly had the grasp for speed been less greedy.

What was obtained? At best a bill on the speed provisions of which the best of lawyers disagree. It is hard to discover wherein the Blackstones of the town outwitted the Dogberrys of the cornfields. Whatever of speed privileges were gained, and they all seem questionable, were obtained with the taxed license tag of a dog collar attached to them, and the proviso of accepting the stamp of criminality for petty misdemeanors. Yet all this was conceded to as the "best that could be done."

Would it not have been better to have faced all the threatened imposition fighting it step by step through the legislature, demanding first and always the right of a citizen to use the vehicle of individual choice upon the public highway? Would it not have been better, even at the eleventh hour, to have been urging veto with the ability to boast of not having invited the impending disaster, either by acquiescence or by passiveness? In event of the threat passing into execution, would it not be better to go down under the blow conscious of having made, from first to last, "a man's fight for a man's right" in the scorn of proffered compromise?

To compromise is to confess fault. The lesson has been well taught. It is to be hoped it has been learned.

### The Subject of Sundries.

From cars to caps, or to lamps, horns and other accessories, is a far cry, so far that no small number of dealers fail to traverse the distance that separates them. In their eyes it seems small business to turn from the sale of a \$2,000 or \$3,000 automobile and

devote themselves to the task of disposing of a few dollars' worth of sundries. Consequently they regard the matter with indifference, and permit opportunities to slip without a feeling of regret.

No very great amount of argument is needed to demonstrate that this attitude is an illogical as well as a foolish one. Wide-awake merchants of to-day realize the value of little things, and not a few of them make a special effort to secure as great a trade in them as possible. They find it remunerative, for in many lines of business the percentage of profit is much larger on small articles than on large ones.

There is another equally weighty aspect of the matter. When a man buys a car he is usually in a mood to keep his purse strings unloosed until he has supplied himself with everything he needs. Having purchased the car he goes right on and stocks up with the various accessories that go with his newly acquired property. Naturally, he prefers to make one job of it and to turn from the car to the sundry counter and there select what suits his fancy. If there is no sundry counter, or if the prices are not right or the assortment incomplete, or even if the dealer is indifferent, he gets a very bad impression, and sometimes begins to wonder if he was wise to buy his car from such an unenterprising merchant.

Still a third consideration should have weight in deciding the matter.

As long as accessories are used, some one must sell them as well as buy. If the dealers do not thrust themselves forward the department stores will. As a matter of fact they are doing this already, and even with a united front presented by the dealers it will not be easy to resist the encroachments of their unwelcome rivals. Much worse will it be if the field is given over to them, as is done in no small number of cases.

We are quite aware that in many stores accessory stocks are kept up and their sale looked after with the needful energy and intelligence. But it is equally true that there are many others where just the reverse is true. It is to them that warning needs to be given, to the end that they may awake before it is too late.

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#### Wheel vs. Lever.

A couple of years ago wheel steering had made such advances in public favor that predictions were freely advanced that it would within a very short time become universal. That prediction has not been fulfilled; of

course. The lever steerer is still with us, and to all appearance is so strongly entrenched that there is not the slightest probability of its falling into disuse.

At the same time the wheel steerer has made decided gains. No maker has turned from wheel to lever steering, while a very considerable number have forsaken the lever for the wheel. It is evident, therefore, that the latter is still the aggressor, and has on its side all the advantages that accrue to the side which forces the fighting. Popular favor is possessed by or assumed for the wheel, and the advocates of the lever would be the last ones to dispute that fact or ignore the important part it plays.

It will scarcely be denied, however, that just as the wheel is the natural method of steering to be used on some cars, so the lever is the equally logical accompaniment of others. The choice should be made, not in obedience to the dictates of fashion, but in consequence of known peculiarities of cars and the adaptability of wheel or lever steering to them. The big car, equally with the speed car, demands the steadiness and reliability that come with the adoption of the wheel. But the superior claims of the lever, with its quickness and ease of manipulation, are quite as undisputable.

Experienced drivers know that with the wheel there should be little necessity for the removal of one hand to manipulate hand levers or other devices. The wheel is first, last and all the time a two hand appliance, and should always be treated as such. Any departure from this principle is a false move, and will be acknowledged as such sooner or later.

The runabout or light touring car—whatever the motive power—is excellently served by the lever. Except at the behest of Dame Fashion, the latter could never fall into disuse. And now, after suffering from the onslaught of the wheel, and successfully resisting the efforts to drive it out entirely, it looks as if it occupied a perfectly secure position.

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#### The Premium Plan.

In France the custom of selling well known makes of cars at a premium, i. e., an advance over the list price, is a common one. The best concerns are glutted with orders, these in some cases extending more than a year ahead. As they are bona fide, even although frequently given for speculative purposes by dealers and others who expect to make a "bit" out of the deal, it naturally

follows that the factories can accept no orders for immediate delivery or for delivery at any time prior to the filling of the orders already in hand.

There are plenty of buyers, however, who desire to buy cars of the oversold makers, and it is difficult for them to believe that they cannot be obtained. Here, then, is the market the speculators have been looking for, and they straightaway proceed to supply it. Frequently they are aided by the makers. The latter will say to the would-be purchaser: "I have no cars for delivery before next year; but I have no doubt that Mr. So-and-So, who has orders placed with us for prompt delivery, will be willing to accommodate you at a slight advance over the regular price." Thereupon the intermediary is sought, terms arranged and the purchase made.

There have been from time to time rumors of the prevalence of such practices in this country. But it is improbable that anything has been done in previous seasons except in imported cars. They have undoubtedly in not a few cases had a premium added to their regular prices, and even at that have found ready purchasers.

This year the effort was made to engraft the practice on to the domestic trade, and to set up a business in American cars sold at a premium. But, unlike the French practice, the premium plan was sought to be put in effect not only without the knowledge of the maker, but in direct opposition to his wishes. As soon as it came to his attention an investigation was set on foot, with the result that the plan is likely to be put a stop to almost before it has got in good working order.

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Unless the projected New York Automobile Club can be inaugurated under really respectable auspices it had better not be inaugurated at all. One of the two men chiefly concerned with it is a discredited ex-bicyclist, who wore a sweater to "prove" himself a bicyclist, and who may wear a leather cap to "prove" himself a motorist. It is not on record that he ever rode a bicycle; he certainly does not own a car, nor is he particularly concerned with automobiling. With such a sponsor or with such inspiration the new club can never hope to be mentioned in the same breath as the Automobile Club of America, which it hopes to rival. It will rather serve mainly to draw a distinct line between the gentlemen and the "gents."

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8 Beale Street.

## CHICAGO SHOW SAFE

N. A. A. M. Again Votes for two Exhibitions—  
Suggestive Action Regarding Endurance Run.

The notion that a national show in New York would be the only one supported next year by the National Association of Automobile Manufacturers was exploded on Tuesday, when the executive committee of that association met and voted to hold a national show in Chicago, and directed the officers to make a contract for one with Samuel A. Miles.

The suggestion that others had designs on the show favors of the N. A. A. M., which was published in the Motor World last week, was borne out by the fact that C. H. Tucker, an officer of the Chicago Automobile Club, was in New York with Mr. Miles at the time of the N. A. A. M. meeting, and the close company they kept indicated that something in the nature of a compromise on a joint contract for the show may have been accomplished.

It is significant that the N. A. A. M. technical committee was instructed on Tuesday to prepare suggestions for an endurance run and submit them at the next meeting. It was not announced that the manufacturers will bolt the Automobile Club's contest and run one of their own, but the action smacked of this idea.

The plan of engaging a big tract of ground and having an exhibit of motor cars in action at the St. Louis exposition was discussed, and it was decided to leave the decision to a vote of the members.

The Pope Manufacturing Company was elected to active membership. W. R. Innis, of the Studebaker Bros. Co., was elected a member of the executive committee, vice F. S. Fish, of the same company, resigned. Mr. Innis is the manager of the New York branch of the Studebaker business.

## Little Hill Climb in "Little Rhody."

A called run of the Rhode Island Automobile Club from Providence to East Greenwich was held last Friday under the auspices of the touring committee, and at East Greenwich a hill climbing contest was held, which, while informal and for club members only, was decidedly interesting.

A short hill was chosen and 110 yards of it measured off which gave a grade of 15 per cent. at the beginning and 18 per cent. toward the top.

About a dozen members participated, under the officiation of the touring committee, who arranged the competitors in four classes. A standing start was the rule for all. The winners in each class and their times were:

Steam—Dr. Morgan McWhinnie, of Pawtucket, in a Stanley. Time—15¼ seconds.

Heavy Gasolene Cars—F. H. Perkins's Peerless car, driven by Harry B. Deming. Time—26 seconds.

Gasolene Runabouts—Arthur S. Lee, in a Cadillac. Time—25¼ seconds.

Electrics—H. H. Rice, in a Waverly. Time—38¾ seconds.

## The Week's Incorporations.

New Haven, Conn.—Hogan Motive Power Company, under Delaware laws, with \$100,000 capital, to manufacture and deal in motor carriages of all kinds.

Syracuse, N. Y.—Onondaga Automobile Company, under New York laws, with \$150,000 capital. Directors: G. L. Gridley, G. E. DeLong and J. S. Palmer, of Syracuse.

Kittery, Me.—American Automobile Front Company, under Maine laws, with \$500,000 capital, to make and sell power carriages. Officers: President, Horace Mitchell, Kittery; treasurer, A. M. Meloon, Newcastle, N. H.

Syracuse, N. Y.—Syracuse Automobile and Motor Company, under New York laws. Incorporators: I. C. Reed, J. S. Palmer, Arthur S. Barber, G. E. DeLong, J. K. Bramer, W. F. Conough and G. S. Gridley.

Portland, Me.—United Motor Corporation, under Maine laws, with \$500,000 capital, to manufacture motor vehicles. Officers: President, C. Harold Wheelock, of Dorchester, Mass.; treasurer, Walter E. Pratt, of Brockton, Mass.

New York, N. Y.—The New York Long Distance Automobile Company, of New York City, under New York laws, with \$10,000 capital. Directors: Lewis Nixon, W. M. McDougall and S. S. Hutchins, of New York City.

Waverly, N. Y.—Vehicle Equipment Company, under New York laws, with \$3,000,000 capital; business of truckmen, hackmen, mechanical and electrical engineers and manufacturers and dealers in motive power. Directors: Martin Conboy, H. T. Mead, Leonard D. Baldwin, C. A. Greene and Henry Schoenherr, of New York.

Detroit, Mich.—The Michigan Automobile and Carriage Body Company, under Michigan laws, with \$10,000 capital (\$2,000 paid in), to manufacture, purchase and sell automobile bodies and carriage bodies. Incorporators: James H. Howick, Henry Wright, Donald Waldeck, George H. Everhart, John Jozwiak, Martin Smith and Charles Crumley.

Harlan, Ia.—The Nelson Gas Engine and Automobile Company, with \$50,000 capital, of which \$10,000 is paid in, to buy real estate, tools and machinery and all necessary appliances for the manufacture of automobiles and gasolene engines. Directors: N. M. Lana, T. K. Nelson, E. E. Dunmore, M. E. Lana and A. H. Nelson. T. K. Nelson is president, A. H. Nelson vice-president and E. E. Dunmore secretary and treasurer.

## Baker Buys Five Acres More.

Land was purchased last week near Edgewater Park, West Side, Cleveland, O., by the Baker Motor Vehicle Company for use as a factory site. The plot comprises five and one-half acres. The Baker Company has been cramped for room for some time, owing to its rapidly increasing business, and the purchase will occasion little surprise. It is understood that buildings to cost \$250,000 will be erected as soon as possible.

## WORSE THAN CONVICT

Here's First Citizen of Free (?) America to be  
Denied Right to Use the Public Roads.

A. C. Banker has the unique distinction of being the first American citizen to be deprived of the right to use the public highways. For thirty days from May 1 he must provide himself with a horse or a bicycle, or some other form of locomotion, if he wishes to avail himself of his inalienable right to use the roads his forefathers made and he helps to maintain. His application for a renewal of his automobile license has been refused for the present by the Chicago authorities.

This drastic action was not taken as a result of a violation of the law by Banker. He was not arrested, or even warned. He merely gave expression to an opinion, viz., that if he should be halted while he had ladies in his car he would not give himself up, but take his passengers home and then return to submit to incarceration. This novel stand stirred the South Park commissioners to the point of passing an ordinance requiring the carriage of license numbers, the action being due, it was stated, to Banker's declaration and his habit of excessive speeding. At the same time a complaint was made to the Chicago Automobile Club, of which Banker is a member. The board of directors of the club took action on the matter and suspended Banker for thirty days from all privileges of the club, and at the same time petitioned the city authorities to suspend Banker's license for a similar period.

Upon making application for a new license Banker was informed that his request could not be granted for at least thirty days. If at the end of that time he promises to "be good," and the Chicago Automobile Club indorses his application, he will be restored to his rights.

Banker states that he will appeal from the directors to the club at its general meeting, to be held to-day (Thursday), for a revocation of the suspension.

## Will Leave Troy for New York.

About June 1 W. S. Howard, of Troy, N. Y., will remove his automobile business to Yonkers, N. Y., where it will be converted into an incorporated company, with the title of Howard Automobile Company. The new concern will build the Howard chainless gasolene cars in four sizes, viz., a single seated chainless runabout, with single cylinder motor, and tonneau touring cars in three sizes, having 15 horsepower, 22 horsepower and 30 horsepower motors, respectively. The motors, transmissions and entire mechanical equipment will be manufactured at Morris Heights by the Gas Engine and Power Company and Chas. L. Seabury Company Consolidated. The directors of the Howard Automobile Company are the officers of the Seabury concern.



## LEMOINE AIRS HIS VIEWS

France's Foremost Maker Discusses Wheels, Axles and Springs—The Metals he Uses.

Paris, April 24.—The manufacture of axles, wheels and springs has been the subject of fully as much investigation as any other part of the automobile, for it is obvious that the parts which have to resist the strains and stresses due to the inequalities and various grades of the road surface, as well as the strains exerted by the motor itself and the sudden and violent efforts put on them by the steering gear, must be given an especially large margin of safety, at the same time that the weight of the axles, wheels and springs must not be increased unduly. In racing cars the saving of weight is such an important consideration that the amount of ingenuity applied to the designing and manufacture of axles during the last year or two has been so striking as to make them a particularly interesting object of study. It may therefore be worth while to give a brief account of the processes of manufacture adopted on this side of the Atlantic, and the following details are extracted from a paper just published which was read at the last automobile congress in Paris by M. Lemoine, the well known maker of axles and springs, who has probably done more to perfect these automobile parts than any other man on the Continent.

In making a comparison between self-lubricating smooth bearings and ball bearings, M. Lemoine is of the opinion that the power absorbed by friction in the former has been much exaggerated, and that it is in fact practically no more than in ball bearings. This opinion is certainly not shared by many automobile manufacturers, whose experiments point to the superiority of ball bearings, at least so far as concerns economy of power, and these bearings are employed on several of the leading types of French and German cars. M. Lemoine, however, states that if the smooth bearings are to give something like the same results as balls from the point of view of friction, they must be made with the greatest care and from the best possible material, and until the statement is disproved by tests between smooth bearings of the highest quality and ball bearings there seems to be nothing unreasonable in accepting it. The smooth bearings must evidently be made with mathematical accuracy and from a material that will withstand wear, since their efficiency lies in the interposition of a thin layer of oil between the journals and the bronze bearings, when to all intents and purposes there is practically no absolute contact of metal. Moreover, the load and energy are distributed over a large surface, whereas with ball bearings they are concentrated on one or two points, when there is always a danger of a ball flying and causing serious trouble. If it be admitted that there is lit-

tle difference between the two bearings as regards friction, it is clear that the smooth bearings have an advantage, since they cost less to make and are not so liable to accidents.

The metal most suitable for axles, says M. Lemoine, is "fine grain iron"—the best wrought iron—resisting a tensile strain of 35 kilos per square millimetre with an elongation of 25 to 27 per cent. The axle journals should be treated by the cementation process and afterward hardened. Mild steel should not be employed in axles, as it is unable to stand the constant shocks and vibrations. Nor are the "half hard" steels suitable for this purpose, owing to the fact that they harden right through the mass, in which state they are inclined to be brittle; consequently, such steel would have to be reheated, when the bearing surfaces would be too soft to resist wear.

The wheel hubs are of two kinds, those for wire spoked wheels employed almost exclusively on light voiturettes, and artillery hubs for wood wheels. These latter are forged out of mild steel, with the bearing surfaces



Fig. 1



Fig. 2



Fig. 3

cemented and hardened. Inside is fitted a hard bronze bearing, in which runs the cylindrical part of the axle journal. Malleable cast iron, crucible steel and bronze should not be employed for hubs, as these metals are not capable of successfully resisting shocks. For the sake of reducing weight in racing cars the hubs are made of "half hard" steel, hardened and reheated. In this way it has been found possible to make the hubs thinner and lighter, and on the whole they have proven successful.

After describing the different types of front axles with smooth and ball bearings, M. Lemoine remarked that for racing cars and other special purposes it has become usual to employ hollow axles of steel with a low content of nickel. This steel is very tough, and offers plenty of resistance to bending stresses and shocks. The axle is drawn out of a single bloom. It is then reheated in a low furnace for eight hours, after which it is drawn out and covered with cinders to cool as slowly as possible. After the axle has been perfectly straightened it is placed in a drilling machine, which works on two axles at a time from both ends, and on being bored and turned it is bent to the required form. The next operation is the hardening and reheating of the axle in a gas furnace, where it remains half an hour; it is then taken out and plunged vertically in water at a temperature of 20 degrees Centigrade, when it is once more heated, at the same time that it is

passed through the bending machine to give the exact form, if necessary.

The nickel steel axles for racing cars are made either hollow or solid, the latter being of sectional steel, and they are either straight or bent. In the former type the hollow varies in diameter, according to the strains the axle has to bear at the different points. The axle is first forged straight, with sufficient metal at the two ends to be turned and machined for the bearings. It is then reheated, rolled and bored, and the two ends are squeezed to diminish the bore, giving to it the appearance of Fig. 1. Next the ends are turned with a flange and are bored out, as in Fig. 2, though sufficient metal must be left to allow of their being drawn out as represented in Fig. 3, when it is ready for the final operation of machining and turning, the flange being recessed and the end threaded to receive the hub cap. After this is done the axle is bent, reheated and hardened, and the journals cemented in a low furnace in the manner already described. These operations necessitate a great deal of care, and nothing illustrates more strikingly the trouble taken in securing lightness in racing cars than the labor spent on the axles. The solid axles are much more easily made, the forged piece of square section being simply passed through a die to give it a cross section, after which it is treated for cementation and hardening in the same way as the hollow axles.

The weight of the hollow axles varies from fifty-two to fifty-five pounds for the front, and from thirty-five to thirty-nine pounds for the rear, according to whether they are straight or bent. Iron axles offering the same resistance would weigh about seventy-seven and sixty-one pounds, respectively. The front nickel steel axle is tested for bending strains up to 3,960 pounds, distributed equally over the springs, when it bends twenty-eight millimetres in the centre without permanent deformation. The rear axle is tested up to 4,840 pounds, when it bends fifteen millimetres.

We should add that nickel steel is not the only metal employed for axles in racing cars, as Charron, Girardot et Voigt have axles of cross section made of gun metal, but they are so expensive that their use is hardly likely to be more than experimental, especially seeing that nickel steel appears to give quite as good results as may be desired. In the new Mercedes cars the front axles have an I section, and it is probable that this will displace the cross section axle.

As regards springs, M. Lemoine says that it is impossible to lay down hard and fast rules governing the flexibility, as this depends upon particular requirements, but he recommends the use of broad springs, because in taking corners they have to resist torsional strains. In racing cars it is usual to employ silicon-manganese steel for springs, and M. Lemoine gives results of tests showing that as regards flexion and resistance this material has a superiority of 21 per cent over the best quality of Siemens-Martin steel. Thus, with springs of the same size and weight, and working under the same conditions, the ordinary springs of Siemens-Martin steel offer one-fifth less security than silicon-manganese springs.

## BATTERIES REPLACE SHAFTS

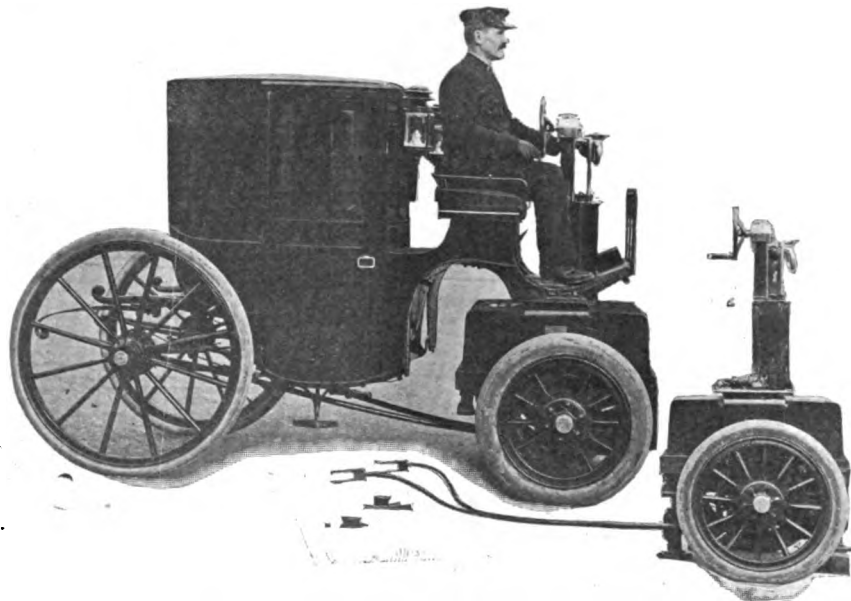
**Italian Invention That Affords Motor Car or Horse Drawn Rig at Pleasure.**

A new device for converting ordinary horse carriages into electric automobiles, which looks very promising, has been brought to this country by the Marquis Jean Mazzacorati, of Italy, who represents Captain Eugene Cantono, of Turin, the inventor.

The tractor, or fore truck, as shown by the

Besides this tractor, Messrs. Thorner and Mazzacorati have with them a novelty in the tire line, of which great things are promised. It looks like a pneumatic, but is not; neither is it a solid or a cushion tire. Instead of pumping air into it a liquid compound is used, which so hardens the rubber that it is claimed it is thereafter puncture proof, and the tire is said to have all the resiliency of its pneumatic cousins.

The tractor and the tires are kept at the Mobile storage station, No. 1,713 Broadway, New York.



CANTANO-MAZZOCORATI ELECTRIC FORE-CARRIAGE.

illustration, is a separate part in which are contained the batteries, motors and all the steering and regulating mechanism. Instead of being coupled up in front of the carriage, the tractor is made a part of the vehicle by removing the front wheels, springs and whiffletrees and putting the tractor in their place. After a carriage has once been prepared for it the change from a horse drawn vehicle to a motor carriage, or vice versa, can be effected in ten minutes.

Forty-four oxide cells compose the battery, which give an estimated horsepower of seven and a probable radius of forty miles. The steering gear is electrically controlled so as to save muscular effort, and a novel feature is that the fore truck is so fitted to the carriage that it can be turned around at right angles and the vehicle turned in its own length. By keeping one such tractor a man could have a stable of different styles of carriages and convert them at will from horse to motor service. The total weight of the tractor is 800 kilograms, and a carriage converted into a motor vehicle by its use would weigh about 1,000 kilos. less than an ordinary electric carriage.

Mr. William Thorner, a promoter, is here with the Marquis, and it is hoped to form a company to manufacture the tractor here for the American market.

## Baker Obtains his Discharge.

An order was granted by Justice Childs, in Special Term of the Supreme Court at Buffalo on Saturday, discharging Nelson P. Baker as temporary receiver of the Spaulding Automobile and Motor Company and cancelling his bond. The order was issued on the petition of Baker, who has concluded his duties as temporary receiver.

Receiver Baker stated in his petition that he had turned over to Thomas E. Lawrence, trustee in bankruptcy for the company, the sum of \$2,695.99, proceeds realized during his term as temporary receiver.

## Small Export Gain in March.

A large total, but a small gain is recorded in the March exports of automobiles and parts. The value was \$93,618, as against \$88,350 for March, 1903. For the nine months of the fiscal year the usual increase is shown, \$759,841 worth of goods having been sent abroad. For the corresponding period of the previous year the figures were \$517,532.

## Will Sell Manger Assets on Friday.

Friday, May 8, at 10 a. m., the effects of the defunct Munger Automobile Tire Co. will be sold at public auction. The sale will take place at the plant of the company, in Hamilton Township, Mercer County, N. J.

## ORGANIZATION COMPLETED

**Syracuse's Long Cherished Association of Clubs at Last a Reality—H. W. Smith, President.**

Pursuant to the adjournment taken on the previous Monday, representatives of New York State clubs met at Syracuse last Wednesday and effected a permanent organization under the name of the New York State Association of Automobile Clubs. The election of permanent officers was then proceeded with, and resulted as follows:

President, Hurlburt W. Smith, Syracuse; first vice-president, Harry S. Woodworth, of Rochester; second vice-president, John M. Satterfield, of Buffalo; third vice-president, Dr. William E. Milbank, of Albany; secretary, Frederick H. Elliott, of Syracuse, and treasurer, Albert J. Seaton, of Utica.

The automobile clubs represented at the meeting were as follows: Rochester, by Harry S. Woodworth, Frederick Sager and John A. Barhite, Corporation Counsel of the Flour City; Utica, by A. F. Seaton; Syracuse, by Frederick H. Elliott. The Buffalo, Albany and Auburn clubs were represented by proxies by telegraph. Harry S. Woodworth presided at the meeting.

The new president was empowered to appoint an executive committee, to consist of one representative of each member of the association, which is to draft a constitution and bylaws and perform all necessary duties between now and the next annual meeting.

The resolution adopted at the first meeting, protesting against the Governor's signing the Bailey-Doughty bill, was ratified. The meeting was given to understand that the Binghamton, Herkimer and Long Island automobile clubs will soon become members of the State organization.

## One Parade Abandoned, Another Announced.

At its meeting last Friday night the New York Automobile Trade Association decided that it would be undignified to hold a parade in the city before the hearing on the Bailey bill was held before the Governor, as it might be construed as a demonstration made with the idea of influencing his action, and it was therefore postponed indefinitely.

The Long Island Automobile Club came out on Tuesday, however, with the announcement that it will have a floral and decorative parade in Brooklyn on the afternoon of May 23 over a route covering the Eastern Parkway and many of the principal avenues of that borough.

## Shattuck Sails Away.

President Albert R. Shattuck of the Automobile Club of America sailed for Europe from New York on the Oceanic yesterday, Wednesday. Mr. Shattuck will be absent for some months and will make an extended tour of the continent.

## HORSELESS AND WIRELESS

### How the Two are Combined in Traveling Telegraph Stations—An Interesting Experiment.

The curious looking automobile shown in the illustration is a travelling missionary. Several of them are being used by the American DeForest Wireless Telegraph Company to go about and give demonstrations of the efficiency of the DeForest system of sending telegraphic dispatches without wires.

This is a system which has been adopted

to Manila, with a relay line running off from Yokohama to Hong Kong. The station at Seattle, now building, will be the largest wireless telegraphic station in the world, and will be produced in duplicate at the St. Louis exposition. There will be three triangular towers two hundred feet in height, with wire screens between, and the station will have a motor generator of 90 horsepower.

The automobile missionaries are a mark of the enterprise of this concern. They have five of them going about in different cities—New York, Boston, Chicago and elsewhere—and giving practical demonstrations to any railroad, steamship or other corporation that

commodate the operator. Then the antenna, or receiving and sending pole, that catches the electric waves—a jointed brass rod eighteen feet long—was erected, and after the generators and transmitters were put in, with wiring and choke coils, the wagons were ready for business. The current used is obtained by tapping the battery used for running the wagon, which consists of forty Exide cells. By the use of the transformers the current is stepped up from 50 volts to 500 volts, and then to 5,000 volts. As the current is being used in very small quantities, and only at the instants when the key is clicking, the battery depreciation is very slight and the radius of the wagon's travel is not appreciably lessened. By measurement it has been found that after three hours of constant telegraphing the battery was depleted by only 1½ volts. The radius of telegraphing with these wagons is only about three miles, but they have been sufficient to so demonstrate the efficiency of the system that the Armour beef packing corporation, the Providence Journal and other newspapers have adopted the system.

The possibilities opened up by this application of the wireless system led a Motor World man to inquire into the feasibility of having private motor cars equipped with the system, so that they might communicate with a station at a garage, club house or residence. It was learned that any motor car, gasoline, steam or electric, will be equipped for a service of fifteen or twenty miles radius at a cost of from \$1,200 to \$1,500. The cost of installing the apparatus is only a few hundred dollars, and it weighs but little, but the company charges a cool \$1,000 for the patented receiver, or responder, that is the mainspring of its system.

#### One Partner in Paris.

Youngstown, Ohio, has a firm of automobile dealers with a partner resident in Paris. Davis & Roubay is the firm name, the partners being Frank B. Davis, of Youngstown, and Leon Roubay. French automobiles and supplies will be sold, the purchases being made in Paris by Roubay.

#### Will Manufacture in Springfield.

The Robbins & Myers Co., of Springfield, Ohio, will enter the automobile field. They will build a gasoline car designed by Ralph Thompson and Emil Koeb. Work will be started at once, and it is expected that the first car will be ready in sixty days.

#### Stamford Completes Organization.

The organization of the Stamford Automobile Co., Stamford, Conn., has been completed by the election of these officers: Charles R. Clark, president; J. A. Tooley, secretary and treasurer, and A. Lincoln Abercrombie, superintendent.

#### Crest Elects Lamb President.

The Crest Mfg. Co., of Cambridge, at a recent meeting of the directors, elected H. W. Lamb, of Brookline, Mass., president; Isaac H. Davis, vice-president, and W. O. Adams, treasurer and manager.



by the United States Government and which is making astonishing progress toward getting wireless telegraphy established in this country on a commercial basis. This concern now has a station at 17 State street, New York City, at Coney Island, Staten Island, Fort Mansfield, Point Judith, R. I.; Block Island, Cape Hatteras, Yonkers, Newburg, Poughkeepsie and Fort San Cristobal, Porto Rico, and stations are nearing completion at Buffalo, Cleveland, Detroit, Chicago, St. Louis and Havana, Cuba. The biggest undertaking of the concern is the establishment of a line from Seattle to Dutch Harbor, in the Aleutian Islands, from where there will be a relay line to Nome, Alaska, with the main line running on from Dutch Harbor to Petropavlovski, Kamchatka, thence to Yokohama, Japan, and from there

may be interested. In this way the reliability of the system is shown and the cause advanced. One of the automobiles with the wireless system on it stands down on Broad street, New York, daily, and from there sends the quotations of the curb market into the offices of a subscriber, from where they are sent out generally on the ticker. These motor cars were originally built with the glass enclosed box, or cupola, on top for advertising purposes, but the city ordinances would not permit of their being run through the streets of the city with illuminated signs inside of the glass dome. The DeForest company discovered in the wagons just the thing they wanted and bought them.

The glass compartment on top was equipped with the special receiving box of the DeForest system and remodelled to ac-

### The Car With the Compound Motor.

A car that will undoubtedly prove a notable addition to the list of those now on the market is the Graham-Fox, which is expected to be ready by June 1. It is the product of the Graham-Fox Motor Co., No. 52 West Sixty-seventh street, New York, which concern has accomplished marvels in the few months it has been at work. Organized last fall to exploit the Graham-Fox compound gasoline motor, it has shown an energy and capacity that speak in no uncertain tones of its future. Starting with nothing but a motor, it has in an astonishingly short time perfected its working organization and pushed to practical completion a number of extremely striking looking cars.

The most advanced car, shown in the cut,

motor is upright, with its three cylinders in line, and is supported from the main frame. The case carrying gears, etc., is supported in a manner that will be shown at a later date in detail.

All side levers are done away with. The control is through the wheel shown under the steering wheel. This operates gear changes, clutch, etc. Engine speed is controlled by throttle and spark, both through one lever on top of the steering wheel. Two foot pedals are used, one operating on the clutch and the other, the emergency, on clutch and rear wheels.

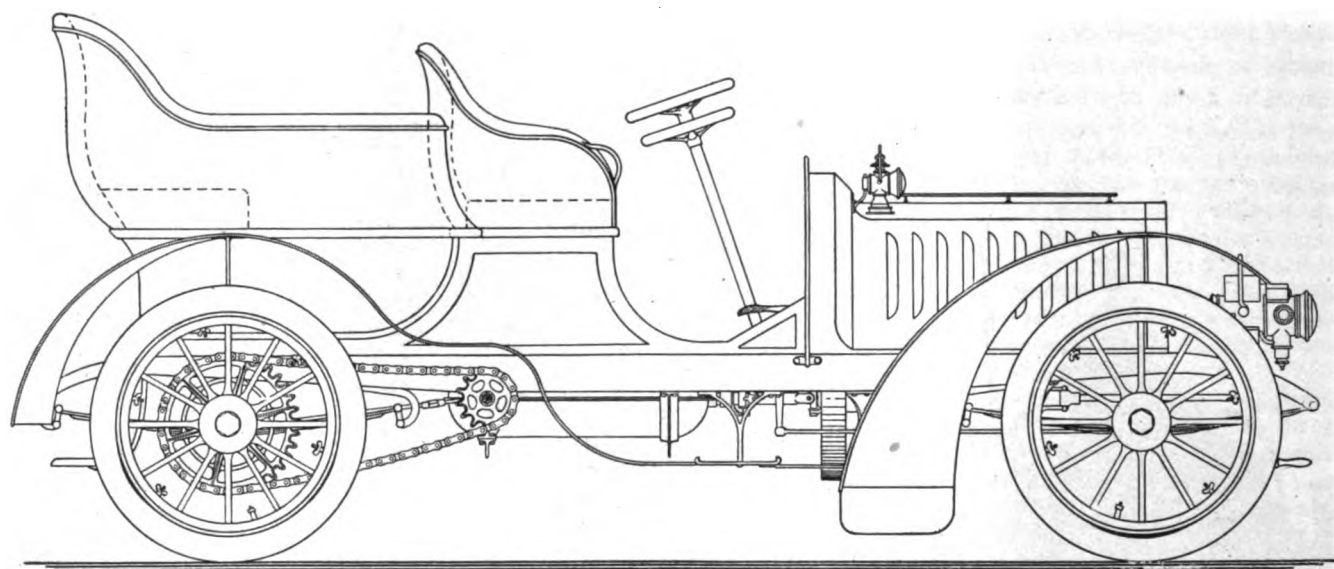
The wheel base is 112 inches; tread, 68 inches. Wheels, 34x4 inches, fitted with Diamond double tube tires. The rear sprockets are bolted to metal hubs and not

### E V.'s New Quarters in Boston.

A notable event in Boston trade circles was the removal of the Electric Vehicle Co.'s branch to its new quarters, near the Trinity Place station of the Boston & Albany Railroad.

Three floors are occupied, the first of which is the garage, on the right, with a floor space of 13,000 feet, while to the left are the offices and showroom of 1,800 feet.

In the rear of the garage is the largest elevator in Boston, capable of lifting 8,000 pounds. On the second floor are the dressing rooms, three in all, one for gentlemen, owners of automobiles and visitors; another for ladies, thoroughly equipped to meet all feminine wants, while the third is for chauffeurs and attendants. All of the dressing rooms



GRAHAM-FOX COMPOUND CAR.

is a particularly fine example of the tonneau type, having ample seating capacity for seven, two in front divided seats, and five in tonneau. The body is of the true King of Belgian style, with beautiful curves, and is built of aluminum all through. The tonneau is detachable. The frame plates of the chassis are of pressed steel, with the added advantage that the inner corners, along the edges, are reinforced with a fillet. The side plates extend in curved lines fore and aft to the springs. The dash is open at the rear, with a forwardly extending housing covering the lubricating tank and pump, spark coil, generator and contact device. The hood has chamfered corners, the straight sides curving out at the bottom to meet the line of the frame. It is open fronted, with a water coil for the circulation.

The motor used is of the Graham-Fox compound type already described in these columns, with two high and one low pressure cylinders, driving through a standard type of shifting gear speed change, with three forward and a reverse, to a cross shaft and two chains to rear wheels. Speed gears, differential and clutch are all inclosed in one case, with splash lubrication. The

to the spokes. To insure true running of the sprockets they are turned and bolted to the hubs, the shoulder for this being faced off in a big lathe after centering on the hub bearing. The water circulation is by pumps driven direct from the 2 to 1 shaft. The first two cars will be equipped with motors giving 17 horsepower, French rating, at 800 revolutions. Subsequent cars of the style shown in the illustration will have 35 horsepower motors at 600 revolutions.

### Combines Cars and Plumbing Work.

At a stockholders meeting of the Chillicothe (Ohio) Motor Storage & Mfg. Co., held last week, directors were elected as follows: Joseph Schilder, B. A. Gramm, W. H. Hunter, James Anderson, Jr., and Dr. W. A. Hall. The directors elected Joseph Schilder, president; B. A. Gramm, vice-president, and Harry Hermann, secretary. The company will manufacture automobiles, plumbing, steam fitting, heating and electric appliances.

A West Bay City, Mich., company is considering the establishment of an automobile line between the two sides of the river, in opposition to the streetcars.

have the latest designed lockers. In addition is the machine shop, with a corps of skilled workmen on duty night and day.

### Receivers for Helois-Upton.

N. W. Bingham and Edw. Davis were appointed receivers on Tuesday for the Helois-Upton Co., with factories at Peabody, Mass., Philadelphia and Chicago. The action arose out of a suit brought by King Upton, of Salem, Mass., a creditor with a claim exceeding \$76,000 and the largest stockholder in the corporation. The debts of the company, it is alleged, exceed \$235,000, and it is unable to pay them promptly.

The receivers, who are appointed to conserve the interests of the creditors and the stockholders, are authorized and directed to carry on the business. Each gave a bond for \$25,000.

The concern manufactured electrical appliances, including storage batteries for automobiles.

### Will Exchange Preferred for Common.

The Electric Storage Battery Co. has filed with the New Jersey Secretary of State an amended charter, allowing an exchange of preferred for common stock.

## LIKE A SCARED RABBIT

### An Opinion of the Climbing Capacity of the new Regas Car—What it is Like.

Believing that a large portion of the public wants a car combining efficiency and reliability with the greatest possible simplicity, the Regas Vehicle Co., Rochester, N. Y., offers their "Regas" air cooled runabout. It is light, strong, fast and with a superabundance of power. A Motor World representative who was given a taste of its quality recently can testify that it not only runs, but can climb hills like a scared rabbit.

The originality of the car's design will be

all controlling levers being attached to steering column under steering wheel.

The body is upholstered in imitation leather, good quality, seat 32 inches wide, with good rubber top that will not crack, and back and side curtains.

The well known Longuemare carburetter is used. A powerful brake on the differential is fitted, and wheel steering is used. The control is by means of a throttle and sparking advance.

While the car is classed as a runabout, it is strong enough and has power enough to go anywhere, and its makers do not hesitate to recommend it for touring.

The designer and maker of the car, J. Harry Sager, is engaged in forming a company to manufacture it.



REGAS AIR-COOLED RUNABOUT.

apparent at a glance. As its name implies, it is equipped with an air cooled motor—cooled perfectly without the aid of fans, pumps or other mechanical contrivances. The engine is the upright type, mounted in front, where all parts are easily "get-at-able" without tearing the wagon to pieces or working upside down in the road under the wagon. The cylinder has a 4-inch bore and 5-inch stroke, and runs 2,000 revolutions a minute in a closed room or when the carriage is standing, without overheating and destroying lubrication. Its normal speed is from 500 to 1,500 revolutions a minute, and it will drive a 750-pound carriage with two passengers thirty miles an hour, climbing nearly all hills found on average roads on high speed.

The running gear is of the side bar construction, light and exceptionally strong, with 6-foot wheel base, standard tread, artillery wheels, 2½-inch single tube tires, and engine attached to running gear, positively eliminating all vibration from body.

The transmission is of the planetary type, with two speeds forward and one reverse,

### Meaning of "Phare."

"Phare," the term so often used by motorists in connection with lamps, is derived from the Greek word pharos, a lighthouse. The original pharos, a beacon light on the island of Pharos, in the harbor of Alexandria, Egypt, was one of the seven wonders of the ancient world.

### Nelson Begins to Build.

The Nelson Gas Engine & Automobile Co., which has just been organized at Harlan, Iowa, is erecting buildings 40x100 and 40x40 feet, respectively. It is expected that they will be in operation by June 1.

### New Concern in N. J.

The Mackle-Thompson Co., No. 855 Magnolia avenue, Elizabeth, N. J., has been organized by A. C. Thompson, of Plainfield and Frederick Mackle, of Elizabeth. Several lines of cars will be taken on.

F. B. Bradley, Hartford, Conn., has been appointed agent for the Peerless car. His offices are in the Sage-Allen Building.

## ONE TIRE PER WORKMAN

### An Idea of What the Making of an Automobile Tire Means in a Busy Factory.

No one can visit the factory of the Fisk Rubber Co., of Chicopee Falls, these days and not come away with a higher appreciation of Fisk tires and of the company whose name they bear.

Every one knows Fisk tires; not every one knows, though, that the picturesquely situated plant is running night and day and even then is unable to keep pace with the flood of orders that are pouring in from all over the country. Nor does every one know the work done to bring about this prosperous condition of affairs nor of the infinite pains taken to maintain it.

Fisk tires are a triumph of the quality policy, pure and simple.

From the very beginning the company started out to make good tires only, and have never varied an iota from this decision. But it is one thing to make good tires, another to sell them, especially when there are other good tires in the field, some with long established and costly obtained reputations. But the Fisk company were intelligently persistent, and the stone of opposition was gradually worn away. To-day Fisk tires are considered in all big contracts placed and used by most of the high grade makers of bicycles, automobiles and carriages.

In a trip a Motor World man made through the factory last week every operation from the compounding in the gigantic mills, which relentlessly grind up and mix great masses of rubber with the other necessary ingredients, to where the finished tires are left to bloom, was of absorbing interest.

Everywhere the same care was apparent; everywhere every one seemed to be aiming at the common object of doing everything perfect; everywhere the same highly developed system impressed itself so that the sum total of the visitor's impression was, as at first stated, a higher appreciation of what it means to make good tires—Fisk tires especially.

What it means to make the new Fisk Detachable automobile tire, which has created what is well nigh a sensation in the trade, may best be appreciated by the fact that two highly trained tire makers working twelve hours per day can only produce two complete tires.

Another thing: Not only does seeing how tires are made make one cease to wonder at their cost, but to marvel that their price is as low as it is. Crude rubber ranges from 80 cents to \$1.20 per pound, so that, based on the weight of the tire, there seems little enough left to pay the manufacturer. But skilful compounding, modern methods of manufacturing and selling do wonders, and the Fisk people perform their full share of the wonder working.



## SHAKE-UP IN NEW JERSEY

**New Club Results and Though Name is Chosen, the Presidency is Thrice Refused.**

Differences existing between motorists of New Jersey's most populous city, Newark, were aired last week, and two clubs will take the place of the one already in existence. Incidentally, it was brought out that \$2,000 had been spent to secure the passage of the Scovel bill in its present form, and that the hat was being passed around to raise this amount.

Dissatisfied with the inaction of the New Jersey Automobile Club, a few members of that organization and nearly one hundred other motorists met at the Board of Trade rooms, in Newark, on Thursday night and decided to form a new club, to be called the Essex County Automobile Club. The call for the meeting was issued by Richard C. Jenkinson, and was attended by President W. E. Scarritt and other members of the New Jersey club, who came to make a defence and to plead for the retention of the old name and a virtual reorganization. They found themselves opposed by a stone wall of hostility, however, and the best they could obtain was a patient hearing and a vote of thanks to President Scarritt for his work at Trenton.

The meeting organized with Mr. Jenkinson as chairman and W. J. Morgan as secretary. Mr. Scarritt took the floor and made a speech deprecatory of a policy of forming a number of clubs. One central body was, he thought, much better. Then he went on to ascribe the inactivity in the New Jersey club to the indifference of its members. It was frequently impossible to obtain a quorum, both at regular and governors' meetings. Yet the club had borne the brunt of the fight against the original Scovel measure.

"It cost us \$2,000, but only a small amount of this sum has been returned to us by members of the automobile clubs of the State benefited by the law," he said.

At the conclusion of his remarks the point was raised whether the meeting was one of the New Jersey Automobile Club or simply a gathering for the purpose of organizing a new club. A general discussion followed, and it was finally suggested that the members of the New Jersey club retire to the directors' room and draw up a proposition embodying their views.

President Scarritt returned in a few minutes and offered as a plan the appointment of a committee of five by Chairman Jenkinson to draw up a list of those present who desired to join the New Jersey club, and they would immediately be elected members at the meeting of the old organization in session in the directors' room. Then the new members would be in control of the New Jersey club and could make such changes as they saw fit, even to changing the name and electing new officers.

The plan, however, did not meet with the approval of those not members of the New Jersey club. The sentiment voiced by Mr. Jenkinson, who during his remarks yielded the chair to C. R. Hoag, seemed to be in favor of a local organization, first taking in Essex County, and possibly Union County, and then a movement could be started to establish a good State organization. The proposition of the New Jersey club was rejected, and a few minutes after Mr. Scarritt had reported to his fellow members in the directors' room the latter retired from the general meeting.

It was then decided to form a local organization to be known as the Essex County Automobile Club. This committee was appointed on nominations: C. R. Hoag, Dr. James R. English, Edgar Sargent, Dr. H. C. Harris and Daniel Pierson, jr. The committee selected Richard M. Jenkinson for president, but he declined, as did Daniel Pierson, jr., and C. R. Hoag. The committee was then continued with power to outline a plan of organization.

### To Prevent use of Monograms.

The Indianapolis, Ind., City Council has before it an automobile ordinance which seems likely to be adopted. It provides for a speed of eight miles an hour in the business district and twelve miles outside of it. It also requires that each automobile driver must register his name and a description of his vehicle with the City Controller, and that he must have his initials on the back of the vehicle in white enamel or aluminum letters. The ordinance was amended to require that the letters be at least three-quarters of an inch apart. This will prevent the use of monograms.

A hearing on the measure was given last week, and Fred M. Ayres, president of the Automobile Club of Indianapolis; H. T. Hearsey, George W. Langborn and L. A. Cox spoke in favor of the ordinance.

A proposition to limit the speed of street-cars to eight miles an hour is also under consideration.

### Price not Weight the Basis.

In arranging for a hill climbing contest the Minneapolis Automobile Club has fixed upon a novel method of classifying the competing cars. The price of the car instead of its weight or power will determine its class. The first division will consist of automobiles which cost \$1,000 or less; second class, \$1,000 to \$1,500; third class, \$1,500 to \$1,750; fourth class, \$1,750. Two cars will start at the same time, the standing start being the rule for all classes. On each car will be one of the official judges, who will carry a stop watch, and the time made by each machine will be recorded at the judges' stand at the top of the hill.

The club has asked the Park Board for permission to hold the contest on Kenwood Hill, which has an average grade of nearly 15 per cent.

## MAY BEAT BAY STATE BILL

**Chance That Viscious Measure may not Pass—Free Ride for "Statesmen" has Influence.**

The belief is gaining ground that the obnoxious Higginson automobile measure, now before the Massachusetts legislature, will fail of passage. The bill has been in the hands of the House Committee on Ways and Means since April 7, and, while there are many rumors in circulation regarding changes contemplated, no move in this direction has yet been made. The opposition has not been relaxed in the slightest particular, and there does not seem to be any reason to apprehend that the bill in its present form will become a law.

The work of opening the eyes of legislators to the faults of the bill is still being prosecuted. On Friday of last week the Massachusetts Automobile Club gave a number of representatives a practical demonstration of the capabilities of the mechanically propelled vehicle. Close to twenty-five automobiles were used, all loaded with legislators. The start was made shortly after 2 o'clock, and the first stop was made at the headquarters of the club, in Boylston street, where luncheon was served and the premises were inspected. The twelve-mile trip began at the drinking fountain at the junction of Commonwealth avenue and Beacon street, and continued over Beacon street to the Brown Church, in Newton Centre, and back on Commonwealth avenue to the place of departure.

The invitation to the legislators was extended by Representative Phinney, of Lynn, who is himself an automobilist and a club member. The speed programme was not strictly adhered to, for the legislators developed a desire to get away from one another's dust by climbing to the head of the procession, and on the open reaches of road there was some lively springing. On the way back, on Beacon street, all stopped to witness a demonstration in control by H. Speare, in a 24 horsepower gasoline car weighing 2,500 pounds and carrying five men. Marks were placed on the ground, and the machine, at a speed of twelve miles an hour, was stopped in six feet; at twenty miles an hour it was stopped in fourteen feet, and at thirty miles an hour was stopped in twenty-four feet. Then, at a good rate of speed, the big car was made to do a grapevine turn between a number of marks placed in the road. These tests were most convincing of the perfect control the operator had of his machine.

### Suffolk, Va., Goes the Limit.

Suffolk, Va., is in a class by itself. It has carried anti-automobile legislation to its logical conclusion, and with ruthless hand barred automobiles from its streets. The action was taken last week, when its Town Council prohibited the use on its streets of "automobiles or other vehicles propelled by steam, gasoline or electricity which make noise sufficient to frighten horses."

## The Metropolitan Salesrooms and Garages—IX

If for no other reason the spaciousness and appointments of the garage of the Smith & Mortensen Co. compel attention. The establishment is an offshoot of the Thirty-eighth street automobile colony, being located at 146-148 West Thirty-ninth, between Broadway and Seventh avenue. Fronting on an asphalt paved street, and but a few doors

and the work bids fair to go on until there is little or nothing of the horse habitations left.

In the case under notice the original stable was demolished and an entirely new building erected especially for the present occupants. It is two stories high, has a frontage of 50 feet and a depth of 100, with an alley in the rear leading to Seventh avenue. The build-

ones in the rear afford a good light in the daytime. The cars are arranged in two rows, facing each other, running the long way of the room. This leaves the center of the floor clear, making it easy to run cars in and out.

To the right is the office and garage entrance, with a telephone booth in the corner. Just beyond, and fastened to the west wall,



SMITH & MORTENSEN, 146-148 WEST 39th STREET.

from the wide and similarly surfaced Seventh avenue, the situation is one that could scarcely be improved upon.

Like so many others of the metropolitan garages, the Smith & Mortensen establishment was formerly a stable—one of the large number of these places that were grouped in the neighborhood of Seventh avenue and Thirty-eighth street, and gave it such a distinctly "horsey" character. The advance of the horseless vehicle has done much to change the character of the place, however,

ing was completed and possession taken in March last, the concern then removing from its former location on Thirty-eighth street, nearly opposite the present one.

The entire first or ground floor is devoted to storage purposes. Entrance from the street is afforded by large double doors, and five square columns supporting the high ceiling form the only obstructions in the immense room. The floor is cement, and four arc lights furnish ample illumination at night; large windows in front and smaller

sufficiently high to give room for a person to walk beneath, is a row of lockers for the use of the chauffeurs, attendants, etc. Next beyond this is a wash and toilet room, also intended for the employees. Crossing over to the east side, and still in the rear, is the gasoline and lubricating oil room, 8x10 feet. An underground tank, having a capacity of 100 gallons, and enclosed in concrete, is located in the alley in the rear. A pipe is run from this tank to the gasoline room and connected with a pump, from which gasoline is

## NEW FIRM'S NEW FIELD

Expert Inspections and Advice Their Specialty—  
How the Scheme is Worked out.

drawn as required. The gasoline is purchased in barrel lots, and run into the underground tank by means of a pipe placed conveniently in the floor. Each barrel is fitted with a faucet, and the gasoline passes from it into the pipe through a funnel. Three large cans of lubricating oil are also kept in the room. They contain heavy, medium and light oils, respectively, adapted for different cars and uses.

Next on the eastern side of the room, going toward the front, is the elevator, which is of sufficient size to carry the largest cars. Then comes the charging plant for electric vehicles, which is just being installed, the concern having heretofore confined its business to gasoline cars. It is intended, however, to make a special bid for the patronage of electric vehicle owners, and to give them the very best service possible.

On the second floor are found the offices, the repair shop and a salesroom, which is being fitted up. Up to the present time Smith & Mortenson have done a garage business almost solely; a few sales of foreign cars have been made, but this branch of the business has not received any great amount of attention. In future, however, it is the intention to go into this more extensively, and in addition to Mercedes, Panhard and Mors cars, one or two of domestic manufacture may be added.

The offices comprise an ante or reception room, a general or bookkeeper's office and a private office, and a ladies' retiring room. In addition there is a stock room, 20x15 feet. Here are kept a number of parts for the principal makes of foreign cars—tires, chains, lamps, horns, etc. The arrangement of this portion of the establishment is excellent; the convenience of both the patrons and the employees has been carefully looked after, and with marked success.

About two-thirds of the floor—the rear portion—has been set aside as a repair shop. Consequently ample space is secured, five large windows give a splendid light, and the equipment of the shop is of a character to make possible the most difficult repairs.

An electric motor generating, 7½ horsepower, supplies the motive power. The shop equipment comprises an engine, lathe, drill presses, grinder, power hack saw, smith forge, anvil, bench vises and tools, etc. The bench runs the entire width of the room, where it gets the benefit of the light from the five windows. Two large skylights furnish additional light.

As already stated, the remainder of the second floor—fronting on Thirty-ninth street—has been set apart for a salesroom. It will be partitioned off from the repair shop and the offices, in the rear and on the side, respectively, and devoted to the display of cars on sale.

Although opened only two months ago, the garage has a good clientele, and new customers are coming in at the rate of two or three a week. Foreign cars are in the majority, although there is a fair showing of American ones. The latter include a big 5,700-pound Ball steam car, the property of Col. Ray.

A new firm, with novel plans for filling many long felt wants on the part of automobilists, has appeared in the partnership of William P. Kennedy and Louis Berg, whose offices are at No. 1 East Forty-second street, New York. They are in business to help out the automobile owners who are inexperienced mechanically, and who have no mechanic or chauffeur who is an adept.

By making weekly, fortnightly or monthly inspections of private motor cars and advising as to their condition, need of repair, new parts, or special care, they propose to be a boon to those who do not know about such things themselves and do not employ any one who does know. The comparatively small retainer paid to Kennedy & Berg will, it is reckoned, be many times saved by the accidents avoided and the extended life of the car, to say nothing of what is saved in not having to employ a chauffeur. Thus, if a car is by expert inspection found to be in a condition such that it is apt to break at some point when next taken out, the owner is notified to have such and such a new part or repair job and the "stitch in time saves nine," not to mention the possible calamity that might attend a breakdown on the road. When it is desired this new firm, which is designed to be one of consulting engineers, will make an inspection after a job has been done and pass upon the thoroughness of it, or they will make an estimate and have it done themselves at special repair shops where they can depend upon the efficiency of the work. In the event of having the work done, nothing extra will be added to the charges by Kennedy & Berg. Their compensation for services will then be obtained in the form of a trade discount allowed them by the actual repairer. They are simply experts standing between the unsophisticated or busy owner and poor workmanship and exorbitant charges.

Most of the business now being done by the new concern is in the line of private electrics which are owned by persons not employing chauffeurs, or who have chauffeurs capable only of driving and washing. In some cases where an unmechanical chauffeur is employed it is found that such a man is perfectly capable of doing what the inspecting firm, after an inspection, pronounces necessary to be done, although he was not capable of himself discovering the need for such attention. As there are many electrics and gasoline runabouts kept under such conditions the field of operation for Kennedy & Berg is apparent. One of their customers recently referred to them, not inaptly, as "automobile veterinarians."

While this consulting and inspecting work is the new feature that Kennedy & Berg

introduce into the automobile realm, it does not constitute their whole business. They do also a general brokerage in buying and selling new and second hand machines.

Mr. Kennedy is an electrical engineer, who formerly was with Singer & Co., London, afterward with the Electric Vehicle Co., of Hartford, and lately in charge of John Wanamaker's automobile department. Mr. Berg is a mechanical engineer who formerly had charge of the Wanamaker station on Fifty-seventh street, New York.

## How he Would Please the Boss.

The average chauffeur cut his eye teeth long ago, and permits few opportunities to swell his exchequer to escape him. Frequently, too, considerations of loyalty have little weight with him. He is on the make, and he does not take any very great amount of pains to hide the fact. In the presence of a Motor World man the other day this conversation went on between a salesman and a chauffeur in the establishment both were connected with:

"Well, your boss's new car has come at last," remarked the salesman. "Are you going to deliver it to him to-day?"

"No, he is in Boston," replied the chauffeur. "Guess I will find out when he will be back and meet him at the train with the car. That will tickle him."

"What kind of lamps is he going to get for it?" was the next question. "You ought to make him buy a good pair."

"You bet your life I will. I have just the pair picked out, and they will look so fine that he will forget to kick about the price."

"Going to buy them here?"

"Not much. I can beat their prices all hollow at So-and-S's, and make nearly twice as much out of it for myself. So why should I monkey with anybody else?" and the light of indignation glowed in his eyes.

## One Result of the Outcry.

It is rapidly getting to a point where every man's hand is turned against the automobile. Hoodlums, both old and young are, in consequence of the outcry against it, looking upon motorists as fair game, and outrages are beginning to increase at an unpleasant rate.

A short time ago V. M. Gunderson, of the Northern Mfg. Co., was in Pittsburg, and in company with O. E. Vestal, the Northern agent there, was taking a ride in one of the stanch little Northerns. A boy playing in the street threw a stick about three inches long at them with such good aim that it struck Mr. Gunderson in the lip, cutting a gash in it that bled profusely. A few inches higher and it would have struck his glasses, with the possibility of inflicting serious injury.

The car was stopped and the hoodlum chased and captured. He was brought back to the car and given a sharp lecture, with the threat of being handed over to the police if he repeated the offence.

## OVERLOOKING THE SUNDRIES

### How Some Dealers Turn Away Money and Make Customers for Other Stores.

"Why is it that some dealers ignore or minimize the importance of doing a good sundry and accessory business? Is it because they consider it beneath their dignity or don't they care for small profits?" The speaker was F. E. Moskovics, who has just returned from a trip throughout the Central West.

"In some cities, notably Detroit and Cleveland, the dealers are wideawake and fully

about it wrong. They made injudicious selections in the first place, and because the goods did not sell they refused to put in others. Then when a customer wanted a certain kind of lamp or horn, and was shown something else, usually some antique relic that no one wanted when it was new, and refused to buy it, the dealer would make a mental note of it and resolve anew to have nothing to do with such an aggravating business. But what else could they expect?

"I tell you, the average motorist is as clay in the hands of the potter, and the salesman who knows his business can mould him at his pleasure. The purchaser of a car usually knows little or nothing about the acces-

mediately become suspicious. This suspicion goes beyond the minor articles under discussion. If the head of the concern cannot see the value of keeping in stock goods that his customers want and must have there is something wrong with him. How can he make a permanent success of selling cars if he is so lacking in the instincts of a merchant? For my part, I do not believe he can."

### To Test Them in Tennessee.

A comparative test is to be made at Knoxville, Tenn., of an automobile and the regular horse drawn wagon for mail delivery purposes. The motor vehicle will be run



"DEMONSTRATING" FOR THE BENEFIT OF A PROSPECTIVE PURCHASER.

alive to their opportunities. They stock up with accessories of every kind, display them attractively and make every effort to secure trade in them. Consequently they do a business in such goods that aggregate thousands of dollars in the course of a year.

"But there is another class of dealers who pursue just the opposite course. Some of them get in a few sample lamps, horns, caps, etc., and then put them in a case and forget all about them. Naturally they don't have a rushing business on them, and if they give the matter any thought at all they put the blame everywhere except on themselves—where it belongs.

"A few even go so far as to refuse to carry such articles as I have mentioned. They don't care to bother with them, they say. Their experience teaches them that it pays to have nothing to do with them. And perhaps it does. But why? Because they went

sories he needs, or thinks he needs—which is sometimes the same thing. If he has confidence in the dealer he will often place himself entirely in his hands. The salesman can usually run over a list of articles that he considers necessary, and the customer will simply nod and make the selection as recommended. You can't tell me that such trade as this is not worth catering to.

"It doesn't take you long to size up an establishment and place it where it belongs. If a display of sundries and accessories is made, and shows evidences of having been selected with care and intelligence, is both complete and varied, and is so disposed that it can be shown to advantage, I say to myself that here is a desirable customer. And I use every endeavor to make him one.

"But if accessories are neither displayed prominently nor regarded as a valuable addition to the concern's stock in trade I im-

mediately become suspicious. This suspicion goes beyond the minor articles under discussion. If the head of the concern cannot see the value of keeping in stock goods that his customers want and must have there is something wrong with him. How can he make a permanent success of selling cars if he is so lacking in the instincts of a merchant? For my part, I do not believe he can."

### For Cigars and Cigarettes.

In a large uptown garage, just inside the entrance, there is a little metal tray affixed to the wall and intended to receive lighted cigars, cigarettes, etc. It has indentations of different sizes, so that the economical visitor reluctant to throw away his "butt" can place it therein and recover it when he is ready to leave. If the hint contained in the tray is not heeded an attendant will quickly step up and ask that smoking be not indulged in.

### How Wintons are Selling.

From Manager Percy Owen down, everybody connected with the big Winton establishment in East Fifty-eighth street, this city, is wearing smiles these days. The 1903 touring cars are coming in at a rate that bids fair to reduce the pile of advance orders to a reasonable number, and thus place the concern in a position to quote early deliveries.

"Cars are coming in finely," said Manager Owen to the Motor World man last week. "We received nine this week, and expect shipments to increase to twelve next week. So far we have had close to fifty cars, and our order list is beginning to lose some of its former congested appearance. As yet the best we can do on new orders is to promise July delivery—about July 10, to be exact. But at the rate we are getting cars, and hope to get them in the future, it won't be long before we will be in a position to advance our delivery date.

"The factory is in splendid shape to turn out goods," he went on. "When I was there a short time ago it had turned out thirty-six cars in one week, and was still increasing its output."

### Tipping the Repairman.

"Tips play the deuce with the automobile business, as I suppose it does with many others," remarked the salesman of an uptown establishment one morning last week. "Here I have been waiting for my car for more than an hour and a half, and it isn't down yet. There wasn't more than fifteen or twenty minutes' work on it, and it was promised to me the first thing this morning.

"What have tips got to do with it? Well, I will tell you. My car has been shoved aside and another one belonging to a customer taken up instead. The workman expects a tip for getting the car out, consequently he gives it the preference over mine. He wouldn't admit it, of course, but that is what is the matter.

"And I can't say that I blame him altogether. He isn't paid any too well, and without the tip he would have a pretty hard time of it. And you can't stop it. You might make a 'bluff' at it, but it would go on just the same. Not so openly, perhaps, but all the more systematically for being kept under the hat."

### The "O. P." Motorist.

"Am I a motorist? Well, yes, after a fashion," said a legal luminary to whom the question was put by an acquaintance.

"For quite a while I have been interested in the pastime, but as yet I have only reached the stage where I make use of 'O. P.' cars—that is, other people's. There are quite a number of us using such cars, by the way, and while we all intend to buy cars of our own, we have not yet taken any steps to that end. Still, 'O. P.' cars do very well to lead us up to the other kind."

### Making the Cap Exclusive.

It is not often that a dealer is found who is so careful of the goods he carries as to choose his customers. Usually "money talks," and the would-be buyer has but to produce evidence of good faith in the shape of cash to have access to all the store possessions.

Recently, however, the Motor World man came across a very different case. As a particular favor he was given a view of a new motorist's cap, the latest as well as the swellest garment yet evolved.

"These are for our favored customers," remarked the tradesman as he proceeded to unlock a certain compartment and bring from its inmost recesses the article referred to. "You see, everybody wears the 'chauffeur's' cap—chauffeurs, mecaniciens, washers, etc.—and if you judged solely by that part of one's garb you would have hard work in telling the owner of the car or his guests from the man who cleans and oils it. Now, these caps are sold only to the former classes. We don't advertise them or even try to sell them to the general trade. No one but myself has access to this case, nor authority to sell the caps without my indorsement. So, you see, we are pretty sure to keep the sale just where we want it, and the purchaser of one of the caps appreciates it at its real value."

### Running Gear First Consideration?

"In buying a car the first thing the prospective purchaser should do is to carefully examine the running gear. That is where strength counts," said a motorist who has had much experience with big cars.

"As a matter of fact, strong wheels, axles and springs make the best life insurance policy I know of. As long as they hold together nothing very serious can happen to the passengers unless the car runs into something. A few extra pounds judiciously distributed at these points will put the matter beyond any doubt. So, whenever I see a car that shows any weakness at these points I always think how foolish the designer was to skimp there. Better add a little more weight and be sure. No one minds fifty or 100 pounds extra, so what difference does it make?"

### "Storage Battery" or "Accumulator"?

Which will win, "storage battery," as it is termed in this country, or "accumulator," as Europeans designate it? Both terms have much to recommend them. Each has a definite meaning, and one can hardly be in doubt as to what is meant by either. "Storage battery" has a little the better of it, for the "accumulator" might accumulate a number of things, whereas a battery brings at once to mind the cells all are so familiar with.

At the same time there is little doubt that "accumulator" is more used in this country than it was formerly. A few years ago many people would not have known what the word meant, so little used was it. Now no one interested in automobiles would fail to know that storage battery was meant.

### An Incident of the Garage.

The owner of the car worked at the crank for awhile, but without result. Then he went over it until he found that the spark was of a portentous leanness.

"That is very odd," he remarked, as if to himself. "It was fat enough and hot enough, too, last night when I put it away. Can it be that the current has been left on and the battery run down? That must be it," and with ire in his very walk he sought the nearest attendant.

"Did any one try that battery and leave the current turned on?" he demanded.

The attendant denied any knowledge of such offence. Then the proprietor was sought. Of course, he was sure that nothing of the sort had been done, and by this time the customer had become fully convinced that it had. They argued the matter for awhile, and finally the customer flung himself away in a rage.

"What do you think of that?" asked the garage proprietor of the Motor World man. "Not even the Angel Gabriel could convince him now that one of our men wasn't guilty. Yet I feel sure that the blame does not attach to us. There are the strictest rules about just that thing, and I am convinced that they were not transgressed in this case. And he is a good customer of ours, too."

### Motor Busses for Honduras.

An automobile 'bus line franchise has been granted to a Honduras company, and it will operate from Tegucigalpa to San Lorenzo, on the Bay of Fonseca, Pacific. The line will be for conveyance of passengers and freight, and eighty miles in length. The prime object is to connect Tegucigalpa, the capital, with the port of Amapala, on the Pacific, but it will extend as the highway is extended. One of the directors, Daniel Fortin, is on his way to New York to buy 'busses. The line must be open to public service by April, 1904, and the charges cannot, without government consent, exceed seven centavos, or nearly three cents gold, per kilometre for passengers, nor one and one-half centavos per quintal of 220 pounds per kilometre for freight.

### The True "Roi de Belge."

"Roi de Belge," or, anglais, "King of Belgium," cars are so named from that gay old monarch, Leopold, whose fondness for motoring is well known. The body is distinguished from other tonneau types by its roominess, high back and sides and a greater roundness of curve of the rearward panels. When a "true" or "genuine" King of Belgium car is referred to, as it frequently is by rival salesmen, a body with these peculiarities exaggerated is meant.

A steam car, designed to carry ten passengers, has just been completed by Carl Hahn, a Pueblo, Col., machinist. He proposes to use it as a 'bus, running between Pueblo and Beulah.





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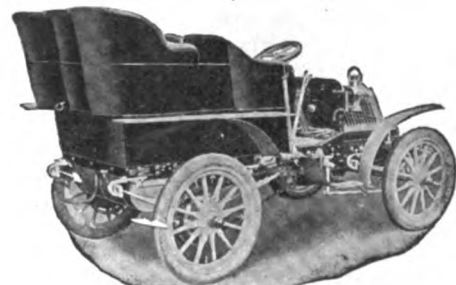
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Studebaker, \$975

Rambler, - - \$750



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See them at our Salesroom and Storage Station,  
138-140 East Fifty-seventh Street

**JOHN WANAMAKER**

### Police Guilty of Oppression?

While the agitation over the pending Bailey bill has been occupying the centre of the stage, there has been going on a police persecution of automobilists in the streets of New York that has about reached the limits of toleration and has resulted in plans for an active retaliation.

Policemen in citizen's clothes mounted on bicycles detailed on Riverside Drive, Boulevard Lafayette and other thoroughfares, and provided with stop watches, have been busy for a week arresting automobilists for travelling at the slightest fraction of speed in excess of eight miles an hour. Meanwhile horsemen and bicyclists have been allowed to impudently proceed at any rate of speed and laugh jeeringly at the spectacle of automobilists being arrested while travelling more slowly than the horse drawn vehicles.

The word persecution is applied to such arrests because of the invidious singling out of the users of motor vehicles to be prosecuted under the law, to the exclusion of other violators. It has been decided that the police have no right to establish a guard of watchers and keep them posted at the doors of saloons or poolrooms in order to prevent them from doing business, and George F. Chamberlin, of the Automobile Club, when asked if such discrimination for arrest and punishment on the part of the police did not constitute oppression, replied:

"It smacks very strongly of it."

The pernicious activity of the police in this respect has been inaugurated at an unfortunate time for successful persecution. Owing to their being aroused by the proposed Bailey law, the automobilists of New York are in a fighting mood, and the new Trade Association is distinguishing itself by an aggressive activity that is rare but inspiring to behold in a body less than a month old.

The character of the arrests and the condition of the laws in New York city offer a splendid opportunity for a successful fight. It is questionable not only whether such arrests do not constitute oppression, even if warranted by the law, but it is questionable also whether they are not illegal or may not be illegal very soon.

### Two Famous Sons may Race.

Two sons of famous Michigan fathers, Russell A. Alger, jr., and Hazen S. Pingree, are likely to meet in a novel contest, the object of which is to settle the vexed question of superiority. Both Alger and Pingree have unbounded faith in their pet cars—a Packard and a White—as well as in their ability to drive them with skill and dispatch. Considerable talk has been indulged in, and it is now proposed to settle the controversy by a match in which both the expertness of the drivers and the speed and ease of control of the cars will be tested. This will be done, it is planned, by starting the contestants at the corner of Jefferson and Woodward avenues, Detroit, at a time of the day when the traffic is heaviest, and let them see which can go

up Woodward avenue to the Boulevard the quicker. Much interest is taken in the proposed match, and a great deal of money is expected to change hands over it.

### Programme of Massachusetts Meet.

An interesting programme of eight events has been prepared by the race committee of the Massachusetts Automobile Club, to be contested at its forthcoming meet at Readville on May 30. The list is as follows:

First Class—Stock steam carriages, five-mile heats, five-mile race, final.

Second Class—Open steam carriages; five miles.

Third Class—Gasolene, 1,000 pounds and under; five miles.

Fourth Class—Gasolene, over 1,000 pounds and under 2,000 pounds; five miles.

Fifth Class—Gasolene, over 2,000 pounds; five miles.

Sixth Class—Massachusetts Automobile Club invitation race; cars driven by owners; five miles; silver cup.

Seventh Class—Motorcycle race; five miles; first prize, \$50; second prize, \$25; third prize, \$10.

Eighth Class—Sweepstakes; open to all winners of regular classes; first prize, \$100.

For each of the first five events two prizes of \$100 and \$50, respectively, will be given. The prizes in the other three events will be as stated.

Entries will positively close on May 27, and must be sent to the Massachusetts Automobile Club, race committee, No. 761 Boylston street, Boston.

The club reserves the right to change the order of the programme, and special classes may be added, the winner of which is not eligible to the sweepstakes unless also a winner in one of the regular events. These races will be held with the sanction and under the racing rules of the American Automobile Association. The course is a regular one-mile track. The starting hour of the races will be 2 p. m., and vehicles will make a flying start. There will be no prizes in case of walkovers, and no second prize unless three start. Entrance fee, \$10. Contestants must be familiar with the racing rules of the American Automobile Association, a copy of which will be mailed each contestant on receipt of entry or upon application. If the day of the race is a stormy one the race will be postponed to the first pleasant day. The management reserves the right to reject any entry.

It is probable that some special events will be arranged. One of these is a race for steam cars, George C. Cannon, Rollin White and F. E. Stanley, all of whom are said to be constructing special steam racing cars, being had in view for this purpose.

"It is perfectly noiseless, and, being run by a gasolene spark, there is no danger of explosions. Best of all, it will not frighten horses!" So the sapient reporter of a Maine paper describes a new gasolene car

### Motor Bicycles for Police.

Matters are moving *swiftly* in the City of Churches. A few weeks ago the suggestion was made that some of the Brooklyn police be placed on motor bicycles and turned loose on scorching motorists. Now it is proposed, seemingly in good faith, to procure "light racing" automobiles and man them with patrolmen to run down and arrest motorists who violate the speed laws.

"The idea has already been suggested," Deputy Police Commissioner Elstein is quoted as saying, "and it may be taken seriously. However, I think it likely that we will come to it in time. Certainly if automobiling continues to increase as it has been doing, automobile police will be absolutely necessary.

"The proper thing to do would be to buy machines built for speed alone, and put two men in each, one to run the machine and the other to watch for violations and make arrests. Then there would be a circus, for the races that would ensue would put more lives in danger than all the speeding of the offending automobilists before. However, something will have to be done, for the present menace to life cannot be allowed to increase."

### Must Have Metal Tags.

Being in charge of the Bureau of Boiler Inspection, metal license cards have naturally been selected by that body for the use of Philadelphia automobilists. Notices were sent out to the owners of automobiles, directing them to return their license cards, and receive in return a steel enameled card, as directed by law. Chief Lukens, of the bureau, stated that the police had been notified of the new regulation, and would, after a reasonable period, prosecute the owners of all automobiles who attempted to operate their horseless machines without having an enameled card displayed upon them.

### To Improve a Neglected Road.

It will be good news to motorists that the contract has been awarded for the improvement of the Belleville Turnpike. On Thursday of last week the Hudson County Board of Freeholders met at Jersey City and took this action. The work will cost about \$45,000, and when it is completed automobilists will have a shorter route by two miles across the meadows between the Jersey City ferries and Arlington, Bloomfield, Montclair and the Oranges. At present the turnpike is almost impassable.

### Country Club Heeds the Signs.

Extensive improvements will be made to the buildings of the Nassau County (N. Y.) Country Club. Included in the plans is an automobile storage and repair room. The club has a considerable number of automobile members, and last year there was some complaint because no provision was made for the care of their cars. The present action is therefore a very welcome one.

## LONG ISLAND'S NEW HOME

**Provides all Features of an Up-to-Date Club Including Ample Storage Room.**

Less than a month ago the building at No. 32 Hanson Place, Brooklyn, was unattractive exteriorally and interiorally. Occupied by the Long Island Motor Co. as a garage and machine shop, but situated on a good residence street, with a wide expanse of asphalt in front, it was a perfect anomaly. To-day it is transformed, the machinery and machinists gone, and in their place the cozy, almost luxurious appointments of a modern automobile club house meeting the eye of the visitor.

For some time the Long Island Automobile Club has been seeking new quarters. The building on Hanson Place has been under consideration for some weeks, it being known that it could be secured from the Long Island Motor Co., whose principals were also prominent members of the Long Island Automobile Club. It was finally decided to do this, and the work of clearing out the effects of the motor company was begun a couple of weeks ago.

The building is two stories in height, 25x80 feet, with a rear one-story extension of 25 feet. Its advantages consisted of an excellent location, being just off Flatbush avenue, and only a short distance from Fulton street, and its adaptability to an intelligent and appropriate scheme of alteration. Such a scheme was devised and carried into execution.

The lower floor has undergone the least change. It constitutes the garage, the entire space, excepting a small office at the front and a repair shop in the rear, being devoted to the storage of members' cars. A man will be in attendance day and night, to look after the entering and departing cars. In the repair shop there will be a work bench, vises and small tools, but no power. The idea is to place it in the power of members to do such simple jobs about their cars as they desire or are able to undertake.

Upstairs there are four rooms and two alcoves. In the front there is a small room for the use of the caretaker, and adjoining it a small stage, designed for use during entertainments. In the back is a well appointed ladies' retiring room and a tiny kitchen, the latter provided with a gas stove and the necessary culinary articles. Between them is a table, with benches around three sides of it; here the al fresco repasts prepared in the little den will be discussed. A chef will, at the start, be in attendance on Wednesday and Saturday nights; and if the demand for the service warrants it will be given every night.

The greater part of the second floor is given over to the main room. This has been treated in an appropriate and homelike man-

ner, with marked success. The brick walls have been painted and decorated with pictures, many, but not all, of them having some connection with automobiles. The floor has been cleaned of its coat of grease and grime, and painted and polished. Rugs placed on it complete the transformation. A rack for steins and other similar objects runs completely around the walls.

A billiard table, a swinging "settee," couches and a number of comfortable lounging chairs, etc.—much of the furniture being natural wood finish and designed and made by members of the club—complete the appointments of the room. Its livable character, however, is best appreciated when seen.

### Rochester Club Revived.

In response to a call issued just previously, some thirty Rochester, N. Y., motorists met at the Rochester Whist Club rooms last week to reorganize and reinvigorate the old Automobile Club of Rochester. It was decided to continue and incorporate the old organization, and sufficient new members were enrolled to bring its membership up to fifty.

John A. Barhite presided at the meeting, and, after stating its objects, said that the election of a committee on incorporation and bylaws was in order. The presiding officer, H. S. Woodworth, D. M. Cooper, C. F. Garfield, Lee Richmond, Dr. C. A. Huber and W. S. Morris were elected as members of the committee.

The committee appointed to select quarters for the club and report at an adjourned meeting, to be held at the call of the incorporation committee, is as follows: F. H. Pettys, George H. Foster and Harry W. Jarlton.

It was stated that there were about 130 automobiles owned in Rochester at this time.

### Organized in Bloomington.

The organization of the Bloomington (Ill.) Automobile Club was completed last week by the election of these officers: President, S. P. Irwin; vice-president, Howard Humphreys; secretary, Henry Throbo; treasurer, Charles Dietz; road captain, C. T. Stevenson; assistant road captain, Jeff Crawford. Directors—W. K. Bracken, Dr. J. W. Bell, I. L. Ide, C. C. Marten, Charles Loper.

### Indianapolis Elects Officers.

Officers for the Automobile Club of Indiana were elected at Indianapolis last week as follows: President, Fred Ayres; vice-president, H. O. Smith; secretary and treasurer, J. A. McKim; directors, Dr. Henry Jameson, Carl Fisher, George W. Pangborn and A. G. Baldwin.

### Emulating the Early Bird.

Mindful of the delay in obtaining a sanction for its race meet this year, the Florida East Coast Automobile Association has made application for a permit to run its 1904 meet. The request was mailed to the chairman of the race committee of the American Automobile Association.



The pleasure of going when and where you wish safely, smoothly, silently, without elaborate preparation or tiresome interruption is characteristic of

## NATIONAL ELECTRIC VEHICLES

Perfection of service due to extreme simplicity of construction. A child can operate a "National." Peculiarly the "ready" automobile for practical, every day, all-the-time use.

Write for catalogue showing wide variety of latest electric vehicles

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THIS ½ page has been running in high-class publications of general circulations. This helps sell NATIONALS. Better get the agency.

**National Motor Vehicle Co.,**  
INDIANAPOLIS, IND.

## 25 MILES IN MINNESOTA

### New Law Sets That Limit but Permits Local Option and Local Numbering.

While by no means as objectionable as some recent automobile laws, one that has just been enacted by the Minnesota legislature is far from being an ideal measure. It contains the usual onerous, and, as there is reason to believe, unconstitutional licensing and numbering features. The numbers are to be not less than  $4\frac{1}{2}$  inches high and "of proportionate width," whatever that may be. One lamp must be carried "during the hours of darkness"; gasoline cars must always have connected mufflers, and motorists must stop on signal. Speeds of eight miles in the "thickly settled or business portion" of towns and villages, and twenty-five miles outside of these limits, are the maximum permitted; but municipal bodies are not prohibited from enacting ordinances calling for lower speeds and local numbering. Altogether, the bill seems to have been loosely and hurriedly drawn, and is susceptible of doing considerable harm. It is as follows:

Section 1. No person, driver or operator in charge of any automobile, motor vehicle or motor cycle on any public road, highway or street within the State shall drive, operate, move, or permit the same to be driven, operated or moved at a rate of speed faster than eight (8) miles per hour within the thickly settled or business portion of any city or village within this State, nor outside of such thickly settled or business portion of any city or village on any public road, highway or street at a rate of speed faster than twenty-five (25) miles per hour; nor over any crossing or crosswalk within the limits of any city or village at a rate faster than four (4) miles per hour, when any person is upon the same.

Sec. 2. The driver or operator in charge of any automobile, motor vehicle or motor cycle on any public road, highway or street within this State, when signalled by the driver of any vehicle propelled by horses, shall stop said automobile, motor vehicle, until the other vehicle has passed.

Sec. 3. Every automobile, motor vehicle or motor cycle, when driven on any public road, highway or street within this State shall, during the hours of darkness, have fixed upon some conspicuous part thereof at least one lighted lamp suitable for the use of said automobile, motor vehicle or motor cycle, respectively.

Sec. 4. Every automobile, motor vehicle or motor cycle using gasoline as motive power shall use the "muffler," so called, and the same shall not be cut out or disconnected within the limits of any city or village within this State. Every automobile, motor vehicle or motor cycle shall be provided with a bell or horn, which shall be rung or blown whenever there is danger of collision or accident. The driver or operator of every automobile, motor vehicle or motor cycle shall be governed by the usual law of the road by turning to the right in meeting vehicles, teams and persons moving or headed in an opposite direction, and by turning to the left in passing vehicles, teams and persons moving or headed in the same direction.

Sec. 5. Before any automobile, motor vehicle or motor cycle shall be driven or oper-

ated upon any public road, highway or street within this State the owner thereof shall take out a license for said automobile, motor vehicle or motor cycle, which said license shall be issued by any State boiler inspector in the county where such automobile, motor vehicle or motor cycle is owned. Any person obtaining such license shall pay for the same the sum of two dollars (\$2.00) to said boiler inspector, who shall issue such license and shall record each license issued by number in consecutive order. The number of each license shall be painted in plain figures upon the back part of each machine in a conspicuous place, and said figures shall not be less than four and one-half ( $4\frac{1}{2}$ ) inches high and of proportionate width.

Provided, however, that nothing in this section contained shall be construed to refer to any driver or operator of any automobile, motor vehicle or motor cycle licensed by any municipality in this State, nor to any automobile, motor vehicle or motor cycle, the numbering of which is provided for by any such municipality.

Sec. 6. Any boiler inspector issuing a license shall keep a correct record of all licenses issued in a book to be kept for that purpose.

He shall make a correct report to the county treasurer of the county in which he resides at the end of each month of all licenses issued during the month, if any, together with one-half of all fees collected, and shall turn over to such county treasurer one-half of all such fees; the other one-half of the fees so collected he shall be allowed to retain for his services for issuing such licenses.

Sec. 7. Any person violating any of the provisions of this act is guilty of a misdemeanor.

Sec. 8. This act shall take effect and be in force from and after its passage.

### Compromise in Washington.

Owing to the opposition of motorists to the proposed automobile ordinance, a compromise has been reached, and an amended ordinance containing these features will probably be adopted by the Commissioners of the District of Columbia:

Instead of tags the numbers of machines will be painted on them in plain figures.

A license will also be required, and the driver of a gasoline or steam vehicle must pass a rigid examination as to qualifications for operating it.

The speed regulations—twelve miles an hour—have not been changed, and the Automobile Club succeeded in having eliminated the proposed penalties of revocation of licenses and imprisonment for repeated infractions.

Automobiles going north and south are to have the right of way at intersecting streets over those going east and west.

### Banquet Attended by Many Notables.

On Saturday night last the North Jersey Automobile Club, of Paterson, had its annual dinner. The presence of a number of distinguished guests gave eclat to the function, and it was heartily enjoyed. With the bringing on of the coffee and cigars the speech-making began. Judge Franklin Van Cleave acting as toastmaster. The principal speaker was Mayor Hinchcliffe of Paterson, others being Judge Francis Scott, Congressman William Hughes and Senator McKee.

## JENKINS'S STRONG PLEA

### Washingtonian Points out in Clear Headed Fashion why Existing Laws are Sufficient.

"When the first steam cars came out great opposition was encountered, and each train was preceded by a flagman on horseback to warn people out of danger," writes C. F. Jenkins, a prominent Washington, D. C., motorist, to the Star of that city. "We laugh at the recollection of this requirement as we speed along in a luxurious modern train. Yet just as foolish regulations are being enacted relative to modern things. It is a natural law that all human progress is opposed, even by sane and reasoning people. Our beautiful asphalt streets were bitterly opposed; the trolley cars were attacked; the bicycle was handicapped by the most ridiculous set of regulations ever passed by our commissioners.

"Now the automobile is coming in for its share of baiting, and though it's unreasonable and uncalled for, it is not unnatural, and is to be expected—because it's new, not because it's a public menace. In the four years it has been on the streets of Washington not a single death has been attributable to its use. This can't be said of any other class of vehicles using the streets in as many months.

"Automobiles are handled with the greatest facility; they glide in and out among teams, cars and pedestrians, and without hitting anything. They are under the most absolute control, both as to course and speed. The horse becomes unmanageable and runs away, causing death and destruction of property. The automobile never runs away. To be sure, pedestrians haven't got used to them yet, and howl, mentally if not orally, not because they're hit, but because they're startled. They did the same when the cycles came into use, but no one cares for them now. So it will be in a little while with regard to automobiles—people will become accustomed to their appearance in the street and will accord them a measure of their just deserts.

"Automobiles are cleanly; they leave the streets as clean as they find them; the pavement is never in need of repair because of them; they take up but half the space in the streets that horses and vehicles do, and because they go from place to place in half the time they occupy the street but half as long. Their use should be encouraged instead of discouraged. No single thing of equal moment will add so much to Washington's beautiful streets as the abuse of automobiles.

"There's regulation enough, surely. No automobile is driven through the streets faster than a cycle policeman can ride. At least no policeman has so reported. They've killed nobody, done no harm to persons or property; why tag them criminals? Are some driven too fast? So are horse vehicles, street cars, bicycles. Automobiles are governed by the same regulation. If its enforcement is sufficient for other classes mentioned, why not for automobiles? Automobile owners don't ask special favors, but simply fair and equal treatment with other users of the street."



The Week's Patents.

725,990. Internal Combustion Engine. Andrew L. Riker, Short Hills, N. J., assignor to the "Locomobile" Company of America, New York, N. Y., a corporation of West Virginia. Filed July 16, 1902. Serial No. 115,843. (No model.)

Claim.—1. An internal combustion engine provided with a suitable inlet port, a supply conduit, clamping means to clamp and place said conduit in communication with said inlet port, and a detachable inlet valve seat removable on release of said clamping means without displacement of said conduit.

726,191. Vaporizing Valve for Explosive Engines. William Readle, Elmira, N. Y. Filed January 17, 1901. Serial No. 43,663. (No model.)

Claim.—1. The combination with a valve shell or casing comprising an air and a vacuum chamber, the air chamber having a hydrocarbon duct leading and discharging thereinto, the duct provided with external air passages, means for controlling the supply of hydrocarbon, and an air inlet, of a valve for intermittently closing communication between the two chambers, the valve having centrally located apertures there-through and constructed and adapted to close and open the hydrocarbon duct and external air passages whereby two separate currents, one of intermingled air and hydrocarbon and the other of air, are admitted to the vacuum chamber, one around the outer edge of the valve and the other through the apertures found therein.

726,226. Explosive Engine. August Krastin, Cleveland, Ohio, assignor to the Krastin Automobile Company, Cleveland, Ohio. Filed August 5, 1901. Serial No. 70,942. (No model.)

Claim.—1. In explosive engines the compression releasing device comprising the combination with a positive exhaust cam of an auxiliary movable cam, the said auxiliary cam being located diametrically opposite the positive cam and operated by rack, pinion and lever mediums arranged in operative connection as shown and set forth.

726,272. Storage Battery. Fritz A. Feldkamj, Newark, N. J. Filed July 8, 1902. Serial No. 114,746. (No model.)

Claim.—A compound electrode for storage batteries, comprising a thin metal plate, and a porous fabric, an active material applied directly upon the outer surface of said thin

metal plate, substantially as and for the purposes set forth.

726,274. Secondary Battery. Pietro Figuccia, Boston, Mass., assignor to Louis Melano Rossi, Boston, Mass. Filed May 22, 1902. Serial No. 108,488. (No model.)

Claim.—1. In a secondary battery, a grid or frame comprising a series of juxtaposed and laterally-separated bars each having a channel in its opposite, outer faces, and masses of active material retained in the channels of the bars, the spaces between the latter being left open and unobstructed.

726,547. Odometer. John N. Leach, Melrose, Mass., assignor to National Oil Heating Company, a corporation of Maine. Filed March 25, 1902. Serial No. 99,908. (No model.)

Claim.—1. The combination with a registering mechanism of a driving mechanism comprising a casing provided with a bearing therein for a worm and star-wheel mechanism, means whereby it may be secured to the steering-knuckle of a vehicle axle and a hollow stem adjacent to and projected at right angles to said bearing and the trunnions of said knuckle, a gear journaled in said casing, the shaft of which extends through and beyond said stem, a worm and star-wheel mechanism actuating said gear and a flexible connection between said gear shaft and said registering mechanism.

726,548. Charging Device for Storage Batteries. Herman Lemp, Lynn, Mass., assignor to General Electric Company, a corporation of New York. Filed July 20, 1901. Serial No. 69,071. (No model.)

Claim.—1. A charging station for electrically propelled vehicles provided with terminal contacts connected with an electromagnetic control device adapted for actuation by a residual battery charge in said vehicle.

726,557. Vehicle Wheel. Felix Mesnard, New Glasgow, Canada. Filed May 5, 1902. Serial No. 106,030. (No model.)

Claim.—1. A wheel hub comprising an inner sleeve having a flange with a lateral face, an end piece having a lateral face disposed oppositely to the said first face, a cylindrical outer sleeve of enlarged diameter lying between said faces and co-operating therewith to form peripheral joints, and spokes, the inner extremities whereof pass through said joints and are mounted in said inner sleeve, the inner extremities of said spokes lying substantially in planes at right angles to the axis of said inner sleeve,

said spokes being bent so as to converge from a point beyond said outer sleeve.

726,595. Non-Explosive Oil Can. Thomas J. Voorhies, McDonald, Pa. Filed October 10, 1902. Serial No. 126,756. (No model.)

Claim.—The combination with the can or like receptacle, of angular spout-section formed integral with and communicating at the bottom of the can, and being formed with a valve seat, the upper end of the vertical portion of this section being formed with exterior screw-threads, a spider arranged in said section, a valve engaging said seat and having its stem operating in said spider, an upper spout section provided at its lower end with an annular flange, a gasket arranged between said flange and upper end of the first named section, a collar having its lower portion formed with interior screw threads to engage the threads of the first-named section, and formed at its upper end with an inwardly projecting flange adapted to rest upon the flange of the last named section, and a strap secured to the can and receiving the last named section.

726,671. Vaporizer for Explosive Engines. George A. Gemmer, Marion, Ind. Filed December 30, 1901. Serial No. 87,705. (No model.)

Claim.—1. In a vaporizer for combustion engines, a number of screens for receiving the gasoline and through which the air passes, a removable block secured to the vaporizer, and posts extending inward from said block on which the screens are mounted parallel with each other.

726,672. Motor Vehicle. Harry Gilchrist, Pittsburg, Pa. Filed February 24, 1903. Serial No. 144,578. (No model.)

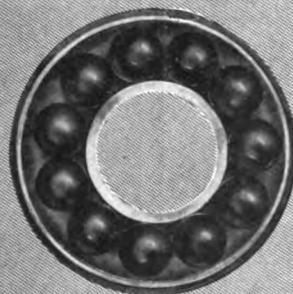
Claim.—1. In driving apparatus for motor vehicles, the combination with an axle and a rectangular block thereon, of a driving gear wheel provided with interior parallel sliding bearings, a sliding frame mounted thereon, and a rectangular box slidably mounted in the frame and engaging the axle block, substantially as set forth.

726,710. Gas or Explosive Engine. Leon A. C. Letombe, Lille, France. Original application filed June 1, 1901. Serial No. 62,696. Divided and this application filed October 15, 1901. Serial No. 78,671. (No model.)

Claim.—1. In a gas or explosive engine, the combination of cylinders arranged end to end, an interposed sleeve entering the head of one cylinder and having a flange adjacent one end for attachment to one of the heads, and a stuffing box mounted on the other head and through which the other end of the sleeve passes.

STEEL

Something more than  
a micrometer is needed to  
distinguish good balls  
from bad ones.

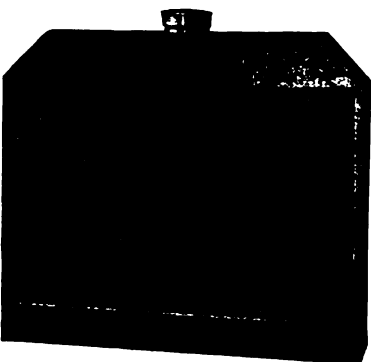


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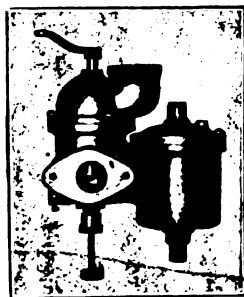
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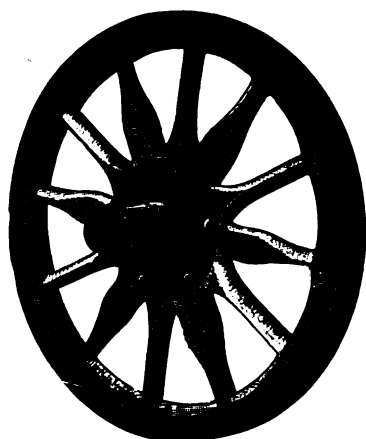
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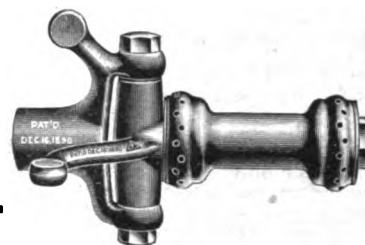
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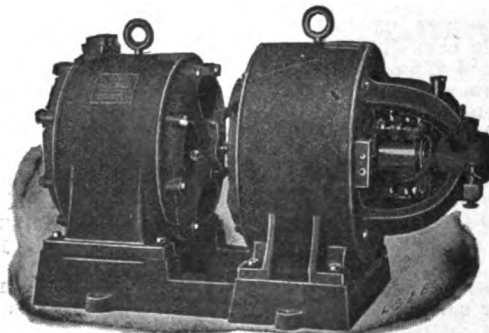
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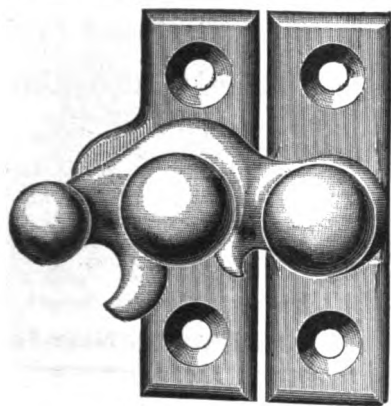
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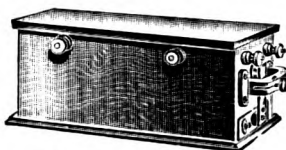
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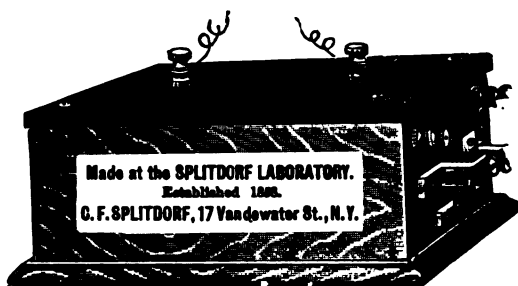
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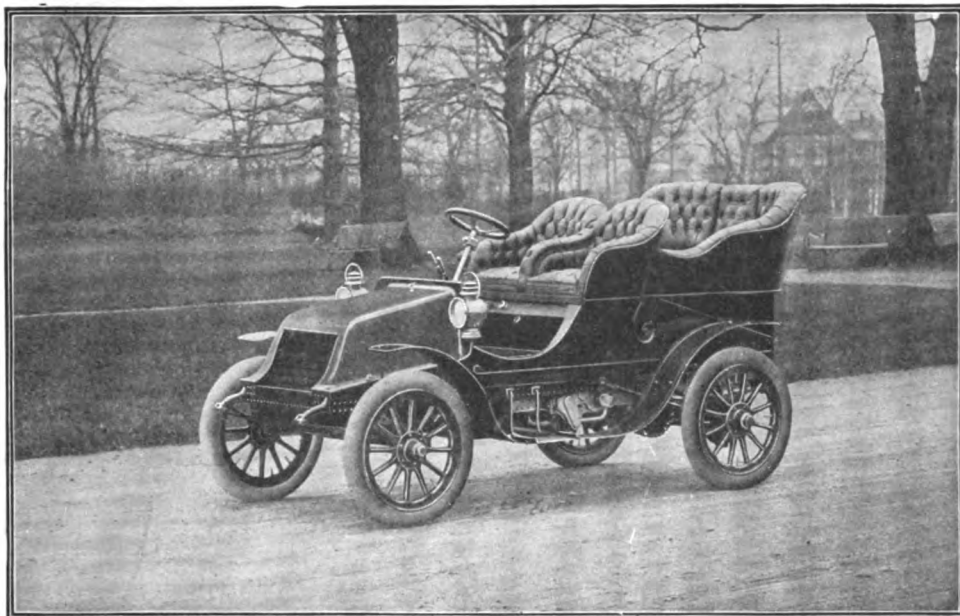
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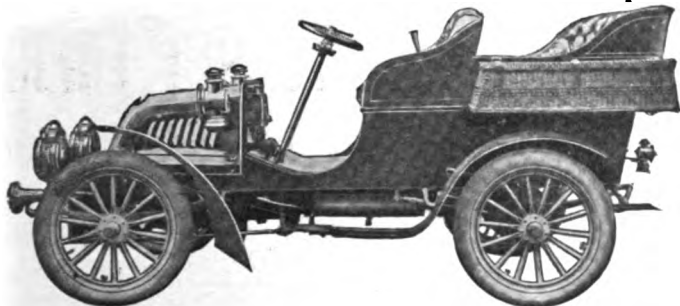
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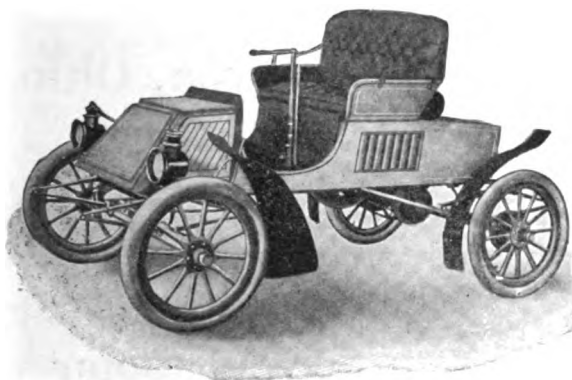
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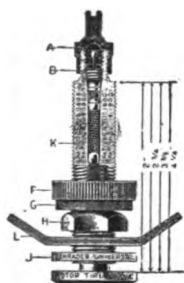
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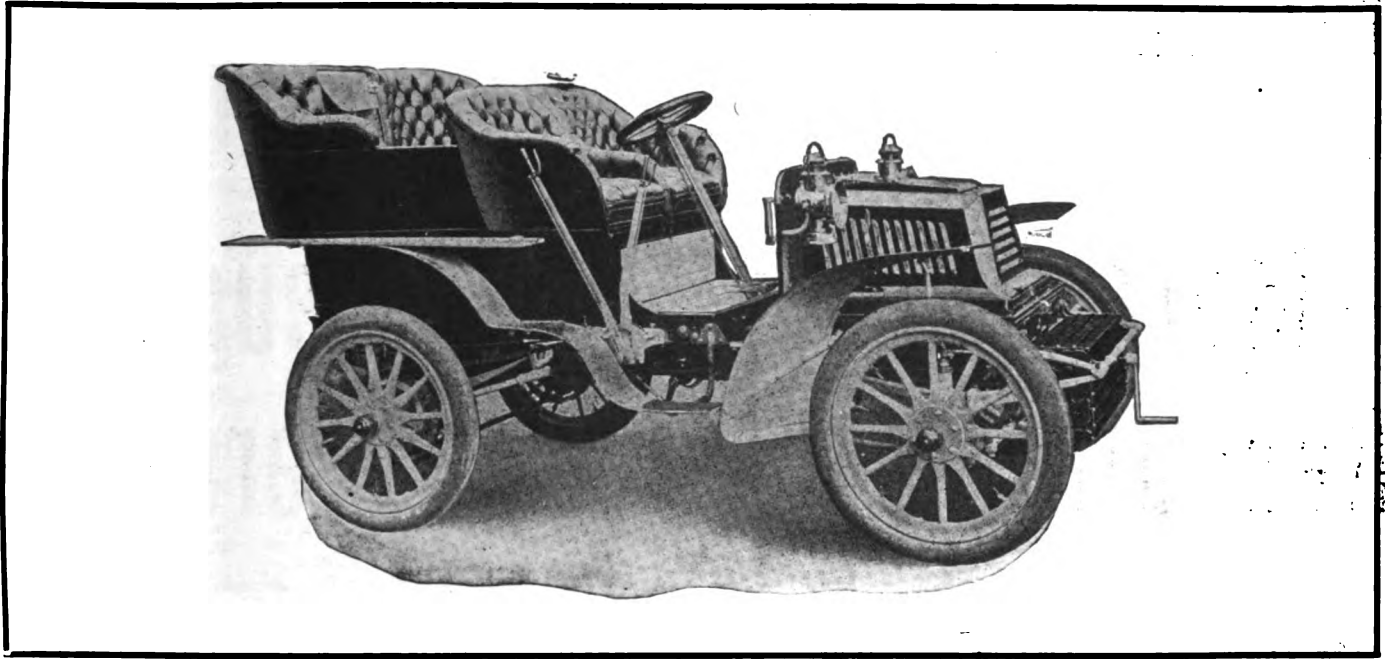
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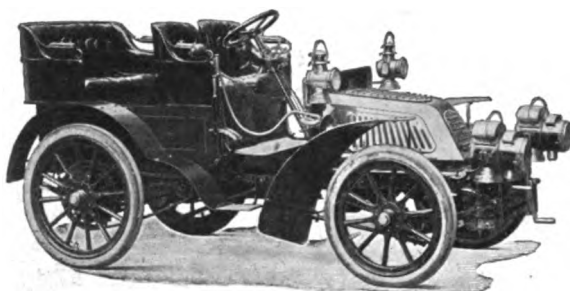
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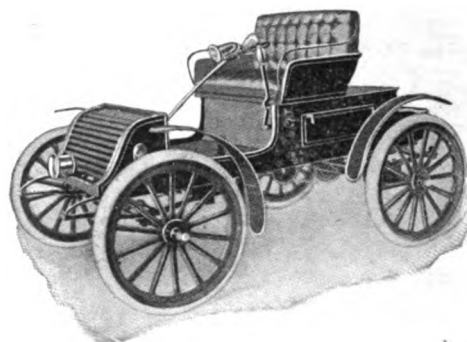
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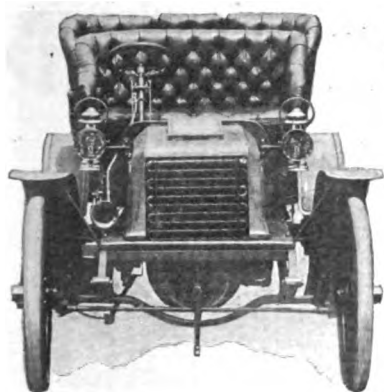
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WINNING FIRST AWARD IN THE COMMERCIAL VEHICLE CONTEST,

WAS EQUIPPED WITH

# DUNLOP DETACHABLE TIRES

THE HARTFORD RUBBER WORKS CO.,  
HARTFORD, CONN.

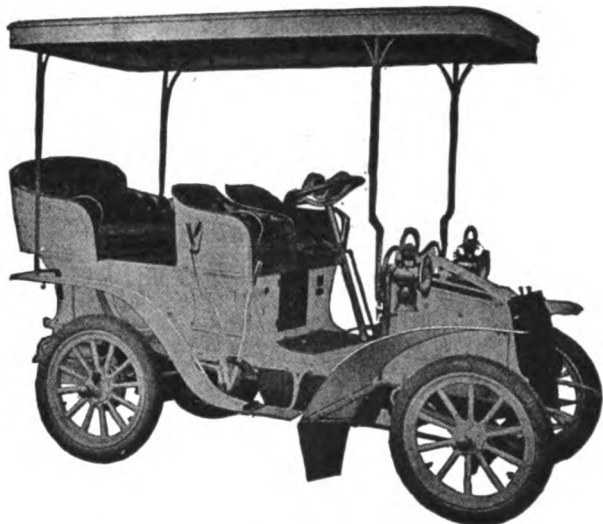
SPRINGFIELD, MASS., May 27, 1903.

GENTLEMEN:—We are pleased to state that our new double-cylinder car, which made such a fine showing in the New York Commercial Vehicle Contest, was equipped with 4 in. x 32 in. Dunlop tires and they carried the car, which weighed complete 3800 pounds, over the roughest roads and most of the way at very fast speed without trouble of any kind. This showing of your tires we consider exceedingly satisfactory, considering the severity of the test.

Yours very truly,

KNOX AUTOMOBILE COMPANY,  
H. A. Knox, Vice-President.

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8 and 12 h. p. 2 cylinder and 16 h. p. 4 cylinder

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NEW YORK AGENTS FOR ST. LOUIS MOTOR CARRIAGE CO.

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## The Moyea

A Touring Car for those  
who desire the very best  
that money will buy.

In Certainty of Operation  
and Elegance of Design  
and Appointment it is  
without a peer.

**Moyea Automobile Co.,**

3-7 West 29th Street, New York.

A good roadster; a good  
hill climber; a surmounter  
of all obstacles is the  
**General.**

It is as swift as a railway  
train and it was built to last.

While its first cost is low the real  
economy of the General is its lasting  
qualities.

For serviceability it is the leading  
automobile on the market.

Why?

Because its working parts are  
few and durable.

Because its power is generated in  
two cylinders.

Because there is practically  
nothing about it to get out of order.

Because the most timid person can  
master its mechanism in a week.

Because it is always under  
the absolute control of

the operator. It is always under  
control for the simple reason that the  
operator cannot lose control of it.

Because being utterly oblivious to wind,  
weather or condition of road it is the greatest  
land cruiser ever made.

It grips the earth with a sense of supreme power  
but is responsive to the most delicate touch.

It will pay you to investigate the General's  
merit before buying. A postal will fetch a  
catalogue setting forth in detail the reasons why  
the General is first in point of service.

Price \$900.

Price, with tonneau (increasing seating capacity  
to four persons) \$1,000.

**General Automobile & Mfg. Co.**  
CLEVELAND, OHIO.

Why not call at the factory or any branch office and take a  
spin in the General before buying. That will demonstrate to  
you the power, speed and the beautiful responsiveness of the  
General.

## The NEW WHITE STEAM TONNEAU for 1903



### NEXT TO FLYING

is the motion of the incomparable WHITE—smooth, noiseless and free from all motor vibrations—a swift, gliding movement that affords the maximum of automobiling pleasure, minus its every defect.

*Write for full particulars, experts' reports and official results of important endurance contests.*

**WHITE SEWING MACHINE CO.,**  
(Automobile Department) CLEVELAND, OHIO.

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## STUDEBAKER ELECTRIC AUTOMOBILES.

**NO EXPERT CHAUFFEUR NEEDED.**

*Can be Run Any Day in the Year, by Any Member of the Family.*



Wide Touring Radius.  
A Successful Hill Climber.  
Smooth Operation.  
Reliable Brake Control.  
Great Strength of construction.  
Perfect Spring Suspension with Resulting Comfort in Riding.  
Can be used equally well over rough pavements or smooth park roads.  
Quiet Running.

Descriptive Catalogue on application. Our complete line of automobiles can be seen at the following repositories and at our Branch Houses and Agencies in all principal cities.

**STUDEBAKER BROS. MANUFACTURING CO.,**  
Studebaker Bros. Co., of New York, Broadway and Seventh Avenue,  
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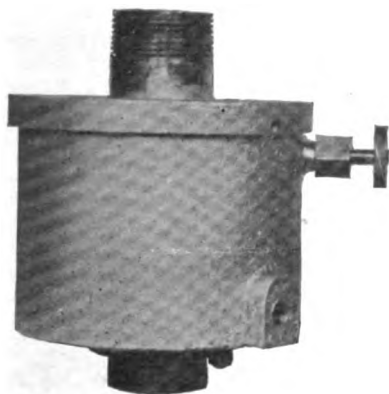
Studebaker Bros. Mfg. Co. 378 to 388 Wabash Ave., Chicago, Ill.

Factory and General Offices, South Bend, Ind.

*First-Class Agents Desired in Territory Not Already Covered*

**Just What You've Been Looking For.**

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A notable advancement  
in gas making  
appliances.

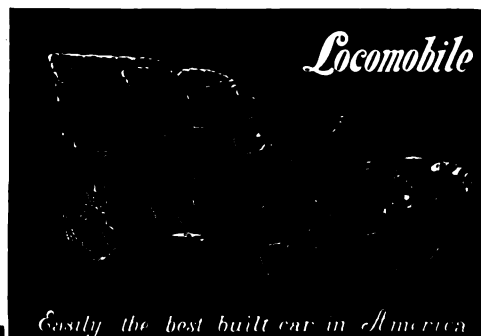
Float Feed and Mixing  
Device in a Single  
Chamber.

**SIMPLE.  
COMPACT.  
RELIABLE.**

**Absolutely automatic regulation of air and  
gasolene.**

EASILY APPLIED TO ANY ENGINE.

**R. W. COFFEE & SONS,  
RICHMOND, VA.**



*Easily the best built car in America*

## Locomobile Gasolene Cars

**ARE THOROUGHLY DEVELOPED. NO EXPERIMENT.**

For instance, the model herein illustrated has been in regular use for over a year. A prominent customer writes: "It is almost absolutely noiseless, climbs every hill I have put it at without trouble, is commodious, and I cannot conceive how anything could be better." We build 9 H. P. and 16 H. P. cars, using front vertical motor exclusively—the only type to consider. The all-steel chassis permits the purchaser to select any desired style of carriage body. All working parts conveniently placed; substantial construction; material and workmanship of the highest order.

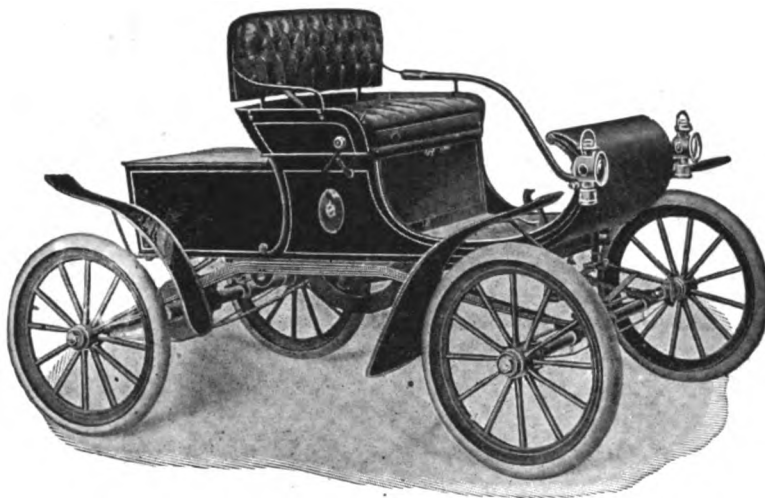
**Price of 16 H. P. Chassis, Including Tools and  
Spare Parts, \$3,200.00.**

Bodies are extra, the purchaser selecting any desired style.  
*Write or visit any branch office for convincing demonstration on the road.*

**The Locomobile Company of America**

General Offices and Factory, Bridgeport, Conn.

BRANCHES: New York, Broadway, cor. 76th St. Boston, No. 15 Berkeley St.  
Philadelphia, No. 249 North Broad St. Chicago, No. 1354 Michigan Ave. London,  
No. 39 Sussex Place. South Kensington. Paris, No. 32 Avenue de la Grande Armée.



## AN OLD SAYING

tells us "Man's best friend is the horse." If this is true, then the horse's best friend is

# The OLDSMOBILE

"THE BEST THING ON WHEELS."

PRICE, \$650.00.

This is particularly true in regard to the Doctor's Horse. If you don't believe it, ask the horse—

## "I Wonder Why?"

ANY OF THE FOLLOWING REPRESENTATIVE DEALERS WILL GLADLY GIVE YOU  
A FREE DEMONSTRATION ON THE ROAD.

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BUFFALO, N. Y.—Jaynes Automobile Co.  
CHARLESTON, S. C.—Army Cycle Co.  
CHICAGO, ILL.—Oldsmobile Co., Githens Bros. Co.  
CLEVELAND, OHIO—Oldsmobile Co.  
COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
DETROIT, MICH.—Oldsmobile Co.  
ERIE, PA.—Jacob Roth.  
GRAND RAPIDS, MICH.—Adams & Hart.  
HARRISBURG, PA.—Kline Cycle Co.  
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MINNEAPOLIS, MINN.—A. F. Chase & Co.  
NASHVILLE, TENN.—John W. Chester Co.  
NEWARK, N. J.—Autovehicle Co.  
NEW ORLEANS, LA.—Abbott Cycle Co.  
NEW YORK CITY, N. Y.—Oldsmobile Co.  
OMAHA, NEB.—Olds Gas Engine Works.  
PATERSON, N. J.—F. W. Stockbridge.  
PLAINFIELD, N. J.—F. L. C. Martin Co.  
PHILADELPHIA, PA.—Oldsmobile Co.  
PITTSBURGH, PA.—Banker Bros. Co.  
POUGHKEEPSIE, N. Y.—John Van Benschoten.  
RALEIGH, N. C.—Raleigh Iron Works.  
ROCHESTER, N. Y.—Rochester Automobile Co.  
SAN FRANCISCO, CAL.—Locomobile Company of the Pacific.  
SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.

TEXARKANA, ARK.—J. K. Wadley.  
TUCSON, ARIZ.—Seager & Close.  
WASHINGTON, D. C.—National Capital Automobile Co.  
GREAT BRITAIN—Oldsmobile Company of Great Britain, Ltd., London, England.  
GERMANY—Ernest Weigaertner, Berlin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Hamon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingley & Co., Johannesburg and New York.  
AUSTRALIA—Knowles Automobile & Power Co., Ltd., Sydney.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
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## OLDS MOTOR WORKS, <sup>1332</sup> Jefferson Ave., Detroit, Mich.

FACTORIES: DETROIT AND LANSING, MICH.



# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, June 4, 1903.

No. 10

## ENTERS CONTEST FIELD

### N.A.A.M. Will Conduct its own Endurance Run —Miles is Made Manager.

It has been decided by the National Association of Automobile Manufacturers that they can promote contests and will do so. A meeting of the executive committee was held in New York on Tuesday, at which the report of the technical committee in favor of holding an endurance contest in the fall was received and approved, and the committee instructed to proceed with its arrangements. It was said that the run will probably be from New York to Pittsburgh, by way of Philadelphia, Wilmington, Baltimore and, perhaps, Washington. By the Pennsylvania Railroad Pittsburg is 446 miles from New York, but it is proposed to make a longer journey than that. The date has not yet been set nor any details decided upon. A contest for commercial vehicles also is being planned. The technical committee in charge of these matters is composed of A. L. Riker, chairman; H. W. Alden, Charles E. Duryea, Rollin H. White and Hart O. Berg.

With regard to the Bailey bill, it was announced that a regular counsel has been appointed to especially arrange for making test cases under the law. This counsel is Charles Thaddeus Terry, and the association will leave it all to him and await his decision concerning what shall be done.

The report of the committee on chauffeurs was laid on the table. After the meeting it was gathered that this action was taken because the association came to the conclusion that it would not recognize the chauffeurs in any way, as it would encourage the men to ask for recognition in other ways. This action of the executive committee leaves the regulations for chauffeurs recently approved by the A. A. A., the A. C. A. and the committee of the N. A. A. M. without the indorsement of the last named body. The action of its committee is not approved and the matter is virtually dropped. In another respect this looks like a declination to co-operate with the Automobile Club and the A. A. A. It is understood that the N. A. A.

M. will act alone also in testing the Bailey law.

A new office of "manager" was created at the meeting, and S. A. Miles, of Chicago, was appointed to the position, but not until after a three years' contract with him to run a show in Chicago had been made. Mr. Miles will have a wide authority and make his headquarters at the offices in New York.

Mr. Miles is the proprietor of the Motor Age, and his contract with the N. A. A. M. requires that he relinquish that publication. It is understood that the latter is being negotiated for by another concern already identified with the trade.

Mr. Miles has been a close friend of President Budlong of the N. A. A. M. for many years.

### Receiver for Advance Company.

The Advance Manufacturing Co., of Hamilton, O., makers of automobile engines, has been placed in the hands of Charles E. Heiser, cashier of the Second National Bank, as receiver. The action was taken on application of George P. Shongen. Many creditors had begun action on claims and the sheriff levied an execution on the company's machinery, completely tying it up. The company is capitalized at \$50,000, and William Ritchie is president and chief owner. It is said that the concern is solvent.

### Seeks to Recover from Kunz.

James T. Goodwin, of Wheeling, Va., has begun suit against M. Rosenheimer and J. L. Kunz, of Milwaukee, Wis., doing business under the name of the Kunz Automobile Co., formerly the Speedwell Automobile Co., for \$911.44, claiming that the automobile sold him on contract was no good. He said that it was in a dilapidated condition, the tires were worn and broken and the machine wouldn't run.

### Company for Owensboro, Ky.

A company headed by Dr. J. H. Hickman, of Owensboro, Ky., and having the support of the Owensboro Wagon Co., is about to be organized in that town, to undertake the manufacture of automobiles. A vehicle designed by A. J. Kemper, of Danville, will be used as a model.

## PACKARD WILL REMOVE

### To go from Warren to Detroit—Four Cylinder Car the Leader for 1904.

It is now about settled that the Packard Motor Car Co. will remove from Warren, Ohio, to Detroit, Mich., this fall.

Action of the sort has been expected ever since the Messrs. Joy and Ducharme, Alger, Ferry and the other Michigan capitalists became interested in the company, but for some reason official announcement of the decision is withheld, although the purchase of the site, nineteen acres on Concord avenue and Harper avenue, in Detroit, is reported. It is, of course, not possible that the removal will occur for several months.

Concurrently it has leaked out, and with every color of authenticity, that for next season it is the intention of the Packard people to market a four-cylinder upright motor car at \$2,500, of which 1,000 will be produced.

### Canton Wants Peerless Plant.

Officials of the Peerless Motor Car Company of Cleveland, Ohio, visited Canton last week, looking over prospective sites for a location for their plant. It was stated that the Cleveland shops are too crowded and that it is necessary to seek a new location soon. The Canton Board of Trade is making efforts to have the concern locate in Canton.

### Fanning Suffers by Fire.

Fire in the building at 84-92 Pratt street, Chicago, on Monday inflicted slight damage upon the Fanning Automobile Manufacturing Co., which concern occupied the second and third floors. It is thought that the insurance will fully cover the loss, which amounted to \$5,000.

### Condon Opens in Newark.

A salesroom and garage has been opened at 282 Halsey street, Newark, N. J., by Geo. W. Condon. He will handle the Packard and the Conrad cars.

## FAULTS OF THE MERCEDES

### New Cup Racers of Cannstadt Severely Criticised in England—Do not Show Improvement.

The Mercedes cars built for the Gordon Bennett Cup race are not very highly thought of by English critics. The cars are well within the limit of 1,000 kilograms, the weight of them being just 990 kilograms. The cylinders are 6 in. by 6 in., but so far they are not giving the power which ought to be obtained from so large an engine, the best power yet realized being 75 h. p. at 900 revolutions. This is a distinctly disappointing result, says the London "Car," as the engines ought to run up to 1,150 revolutions, but whether the motor can eventually be made to accomplish this is another question. The radiator is half the width of the 60 h. p., and the axles are about half the diameter. The engine is the same as the 60 h. p. in design, but bigger, especially in the cylinders, which are, as said above, 1 in. more in diameter. The Lindsey clutch is the same pattern as on former cars. The gear also is the same as in last year's 40 h. p., the countershaft being the same size, too, the diameter of which is  $1\frac{1}{4}$  in. The wheel base is 9 ft. 9 in., and the back of the driver's seat is only 3 in. in front of the back axle. The German cars will use Continental tires, which can be very easily manipulated, being very thin at the sides and flexible, but having a thicker tread. It is interesting to note that four French workmen have been sent for to come over to Cannstadt to make wheels for the new cars. The control is identical with the system at present in use on the 60 h. p., but last year's gear has been put in and the same gear case is used. The proportions of the gear are different, for the gear is higher on the top speed, whereas in the case of the 60 h. p. the proportions between the gears are equal.

Thus in the new racing cars this high top speed obviates the use of very large sprockets. The proportion in the gear box on this top speed is about three to one, but this is brought down again by the bevelled gear, which makes the speed of the countershaft on the top speed equal to that of the engine. The square shaft in the gear case has been giving some trouble, and seems to be so far unequal to the great strain which is put upon it by so large an engine.

The plugs are somewhat different, although the system of ignition is the same. Only twenty-two gallons of petrol are carried in the tank, and if these cars prove to have the same consumption as the 60 h. p. cars, which have already been tested in this respect, this amount of petrol would appear to be inadequate, as with a consumption of one gallon to ten miles (admittedly a moderate estimate), the car could only go 220 miles without refilling the tank, and it is probable that 180 miles will be

nearer the limit of distance that they will be able to accomplish on the present tank capacity.

This high consumption is probably owing to the carburation being imperfect, and so far this has been an obstacle which Herr Maybach has not been able to overcome. A good deal of petrol at present finds its way into the cylinders without being properly vaporized, which also accounts for the inadequate power obtained so far.

Generally speaking, in the construction of these cars, there does not seem to have been the same notable advance as in previous types; for instance, in the advance of the 40 h. p. on the older 35 h. p., or in the 18 h. p. as the last development of the small, light and fast type of car of this year. The well deserved success of the Mercedes car in general is due to the very excellent material used, and the adaptation of already well known principles by intelligent designers and good workmen.

### Owen has Troubles.

Percy Owen, manager of the New York branch of the Winton Motor Car Co., had his own troubles just before he sailed for England to take part in the International Cup race. He had to deal with an incipient strike by the hands in the salesroom and storage station on Fifty-eighth street, near Third avenue, and during the whole week previous to his departure his working force was undergoing reorganization, involving the placing of a new foreman in control.

### A Spring Secured Grease Cup.

A grease cup with a cap that cannot shake loose or work off has been brought out, and is being marketed by the Bowen Mfg. Co., Auburn, N. Y. It is adapted for use on automobile axles, engines, steering knuckles, etc., and is made of solid brass in two sizes, 1 inch and  $1\frac{1}{2}$  inch in diameter, finished in polished brass or nickel plate.

### Sells Pierces in Hoboken.

The Geo. N. Pierce Co.'s line of automobiles has been taken on by Albert W. Grasshoff, 191 Clinton avenue, West Hoboken, N. J., he having secured the agency for Hudson County. He will also undertake automobile repairing in conjunction with his cycle and motorcycle business.

### Utah Company Ready for Business.

The recently incorporated Utah Automobile Co. has opened a store at No. 21 East First South street, Salt Lake City. The agency for Cadillac and Pierce cars has been taken, and a little later a general garage business will be done.

Deliveries of Berg cars are being made in steadily increasing quantities. It is expected that shipments to the Ranier Co., the New York agents, will shortly reach 20 per week.

## COMMERCIAL TEST AWARDS

### Knox Wagons get First and Second in Their Class—One Car That Finished was a Wreck.

Owing to a serious delay in obtaining all the particulars concerning the stops made by one of the delivery wagons the calculation on the awards for the commercial vehicle contest of the Automobile Club could not be completed until to-day (Thursday). After the figuring had been done the contest committee had to pass on them, and could not make the awards until too late for the official results to be printed in the Motor World this week.

It is known, however, that the Knox delivery wagons will get the first and second awards, gold and silver medals respectively, for the second class. The Waverly electric delivery wagon and the Mobile were the only contestants in the first class, and of these two it is probable that the electric will get the gold medal.

Among the trucks, the Herschmann express wagon is expected to get the gold medal for the fourth class, and the Morgan truck the silver medal, while the Coulthard truck, being the only one in the fifth class carrying five tons, will undoubtedly get the gold medal for that class.

The details of the performances of each of the vehicles has been tabulated and the cost of operating each has been carefully figured out in ton miles. This makes a batch of very interesting information, which will be printed in pamphlet form by the club later.

Since the contest information has come to hand which suggests that the contest committee was lax in one very important respect, although it was due to an oversight, which is pardonable in a first essay at conducting such an affair. The condition of the vehicles after performing the task imposed would have had a very important bearing on their worthiness, and the committee should have had a report made by experts on the condition of each car after the run. This is emphasized by the fact that at least one of the steam haulers was put completely out of business by the run, although this is not generally known. It has been learned positively, however, that the vehicle referred to could not have continued had the contest been a few hours longer. Its running gear was broken in several places, its boiler was burned out, its pumps broken, and altogether it was a complete wreck. The point of this is that merchants might be induced to buy certain styles of cars on the strength of the showing made in the contest; but if they were like the one mentioned after the run the buyer would be stuck. If the condition at the finish had been noted and made known it would have been fairer to those for whose benefit the contest was held—the merchants.

## CARS AND TIRES

### Great Increase in Number of Former Causes a Temporary Tire Shortage.

"It is, I think, a conservative estimate that the number of automobiles in use in and around New York is now double that at the end of last season," said Manager O. J. Woodard, of the Diamond Rubber Co.'s New York branch, in reply to a question put to him by the Motor World man.

"My estimate is based on what I see, on the amount of business done by this branch and by the enormous quantity of repair work we are getting and also by the impossibility of catching up with orders, either here or at the factory. Taking all these things together, I feel sure that the increase in the total number of motor vehicles is as great as I have stated.

"We are many hundreds of sets of tires behind, and the factory has probably four thousand or five thousand sets on order. And it doesn't seem possible to make any material gains. New orders roll in just as fast as we are able to fill the old ones.

"Here is an instance that will illustrate the high pressure under which we are all working: This morning the Oldsmobile branch telephoned us they had just received two carloads of Oldsmobiles, with the tires in the cars, but not put on, and they wished us to send down right away and put them on for them. We have a couple of new ones there now, hard at work getting these cars ready. Why were they not put on at the factory? Well, I suppose the tires got there at the last minute—perhaps when it had been decided to ship the cars without them—and they were sent along, so they could be put on here."

### Exports Show Slight Decline.

For the first time in many months, the monthly exports of automobiles and parts show a decline from the figures of the corresponding period of 1902. The figures are \$134,680 for April last, and \$151,190 for the same month of last year. Nevertheless, the shipments were heavy, being nearly 70 per cent in excess of March, and they suffer by comparison only because April, 1902, was an extraordinary month. For the ten months of the fiscal year a gratifying increase is still shown. The figures are \$894,521, while for the same period in 1902 they were \$668,731.

### Brandes Gets St. Louis Car.

An American car has been added to the lines carried by J. C. Brandes, 28 West 33d street. He has secured from the St. Louis Motor Carriage Co., St. Louis, Mo., the agency for their cars in New York and vicinity.

### Kelley Starts for Himself.

As every one knows, it is the energetic young men who made the bicycle business who are now playing important parts in making the automobile industry the wonder of modern industrial development. Of the number there is no better equipped graduate than Charles F. U. Kelley, for several years sales manager of the Pennsylvania Rubber Company, of Jeannette, Pa., and who is now entering the automobile business via the "manufacturers' agent" route. He already has made arrangements with several manufacturers of



leading standard articles to handle their goods on an exclusive basis. Mr. Kelley brings to his new work a ripe experience and a thorough and extensive acquaintance covering the entire United States and a personality that wins friends wherever he goes. In his new field Mr. Kelley will very likely not divorce himself entirely from the Pennsylvania Rubber Company, but will probably continue to handle their lines in conjunction with the others he may select.

### Moyea Opens New York Store.

An important move has just been made by the Moyea Automobile Co., they having leased the premises at 132 West Forty-ninth street, formerly occupied by the Empire Automobile Repair and Storage Co. This they will conduct as a repair and storage department, pending the completion of a large building they are having fitted up. Repairs of all kinds to foreign as well as American cars will be made at as reasonable prices as is consistent with good work.

### Cadillacs Please in Penn's Town.

So well has the Cadillac taken hold in Philadelphia that John Wanamaker's store in that city has been literally snowed under with orders. A representative of the concern recently made a trip to the Cadillac factory for the purpose of hurrying shipments.

## BUFFALO CO'S GROWTH

### Splendid Plant for Production of Motors now Ready for Occupancy.

Niagara street, Buffalo, is rapidly getting to be automobile manufacturers' row, the latest accession being the Buffalo Gasolene Motor Co., which have recently erected a splendid new plant at the corner of Niagara street and Auburn avenue. Incidentally, this move is eloquent of the prosperity the company have enjoyed and a lasting testimonial to the worth of their product, the famous Buffalo gasolene motors.

The building is a substantial brick structure 64x102 feet, two stories high, and built so that another floor may be added without stopping work for a single day. The plot of ground has 117 feet frontage, and the land runs back to the railroad, providing excellent shipping facilities. The plant is operated by Niagara Falls power and is equipped with the most modern machinery. As an instance of the solidity of the plant itself, it may be said that the testing room floors are of cement twenty-four inches thick, while an overhead track transfers motors from the testing room to the shipping room. A blacksmith shop is in the basement, and the work is sent around the factory in rotation and under ideal conditions of manufacture. As an instance of the way in which the company do things, it may be mentioned that they started moving on Sunday, and on Thursday morning were running eighty-eight power machines in the new factory.

Up to the present time the demand for the company's engines for marine work has taxed their capacity to the limit, but it is the intention in the future to devote more time and space to the production of automobile motors, which will be furnished from two to twenty-five horse-power, inclusive.

### The Week's Incorporations.

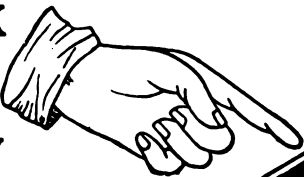
New York, N. Y.—New York Auto Car Co., with \$30,000 capital, to manufacture vehicles. Incorporators, Bernard Uhren, John Lurie and Jas. J. Head, all of New York City.

Chicago, Ill.—Bode Automobile Co., under Illinois laws, with \$50,000 capital, to manufacture automobiles and vehicles. Incorporators, Leon S. Alschuler, James G. Condon and Charles W. Stiefel.

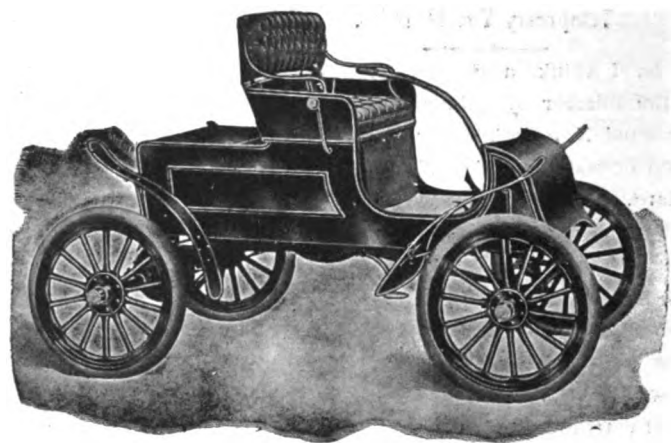
Chicago, Ill.—Automobile Maintenance Co., with \$2,000 capital, for the purpose of manufacturing, repairing and dealing in automobiles. Corporators—Gail Dray, Herbert R. Lloyd and George C. Madison.

New York, N. Y.—C. A. Duerr & Co., under New York laws, with \$50,000 capital, to deal and trade in automobiles and automobile supplies. Directors—Charles A. Duerr, Irving L. Atwood, Raymond H. Weaver, New York.

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the best Runabout  
look  
this  
way



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284 Jefferson St.

**SAN FRANCISCO,**

114 Second St.



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NEW YORK, JUNE 4, 1903.

### The Real Issue.

"Whom the gods would destroy they first make mad."

Hon. Edward Bailey, Jr., of Patchogue, L. I., where the clams come from, is mad. Rather tardily he perused the Motor World's proposed bill suggesting that horses, mules, asses and oxen be registered and tagged and be proven not susceptible to fright before being used on the public highways. As he read he saw, or thought he saw, in it a parody on the jug-handled law which he helped foist on the automobilists of New York State, and straightway his choler rose. Seizing his pen, he wrote that he declined to dignify the proposed measure by discussing it. Abuse being cheaper, he at once descended to abuse, and after recourse to a mirror he saw reflected in the suggested law a prototype of the long-eared animal which would be affected by its provisions.

Hon. Webster Grim, who attached his

name to a Siberian law designed to affect Pennsylvania automobilists, has also been heard from. He has read the Motor World's law, and he also declines to discuss it; but, unlike Bailey, of Patchogue, where the clams come from, he is more amused than angry. But he adds that automobilists will do well to accept whatever requirements the Grims and the Baileys may impose on them, in order to spare themselves "additional humiliation"; this, he intimates, may take the form of sweeping them off the roads entirely.

But, despite the anger of Mr. Bailey and the amusement and veiled threat of Mr. Grim, there is no reason why automobilists should tamely submit to such burdens as they impose; they are legislators of the type that pander to the cry of the rabble; the policy of equal and exact justice to all is of secondary importance, and the constitutionality of such laws as they father is of even less concern. They fancy that they can pile on "humiliation" at their pleasure. But fortunately for the country there is a tribunal that has not to reckon with the vote of the populace, and it is that tribunal that must be invoked to bring to their senses the Baileys and Grims wherever they may exist, and to teach them that they are not free to "humiliate" any class of citizen whenever and however they will.

The automobile is either a legitimate vehicle or it is not one. If it is legitimate, the men who use it have "the right of every citizen of this country to the equal and impartial use of the public highways which their fathers dedicated or for which their taxes help to pay"—no more, no less. If the roads are maintained for men driving horses, or if the horse has paramount rights on the road, it is time the fact was made plain.

These are the questions which must be decided. They must be settled that those who have invested or may invest millions in the manufacture of self-propelled vehicles, and that the tens of thousands of workers employed by them, may know that their investment and pursuit is or is not at once legal and legitimate. The questions must be settled that the citizens who use such vehicles may know that their rights of citizenship—that the right to use the public roads cannot be suspended or revoked—are secure, and that they can or cannot be "humiliated" at the pleasure of any vote-seeking politician "blest with a little brief authority."

It is, in brief, the question of citizenship—the question whether right or the rabble

rules these United States. And the day that it is decided that each and every citizen is not entitled to "the equal and impartial use of the public highways," that day should the stars and stripes be hauled down and a sceptre be placed in the hand of the President and a kingly crown upon his head.

### Door Ajar, But in Hand.

It is a good thing for the American Automobile Association to become a democratic body which every one interested may join, and thereby obtain a voice in the making of the rules which govern them in racing and other affairs. It is a course that was favored by the Motor World long ago.

Now that it has been put into effect by amending the constitution, a new and unwonted burst of energy must be developed within the A. A. A. in order that the change in the character of the organization may become actual and not remain merely nominal. It is not enough to have the constitution altered so that those who come knocking may be admitted. The desire to approach and knock for admission must be created, and this must be done by making the organization of benefit to the rank and file of automobilists. This can best be done by protecting their rights and conserving their interests in every way. The Automobile Club "of America" is not a national body, and the A. A. A. is one. The association should be foremost in antagonizing vicious legislation, promoting sound laws, in checking inequitable enforcement of the laws, in fighting all sorts of abuses, in advocating road improvement, in governing the racing sport and giving help in time of need to those who call. In order to grow great in membership and power the A. A. A. must do all this and keep active, and, being active in good work, it must advertise the fact and be energetic in recruiting. Under the present administration there seems to be little prospect of the great activity required. Business men who hold executive offices in such organizations are apt to be too busy and also to have a distaste for the sort of enterprise that is necessary, and the secretary of the A. A. A. is already overburdened with work and responsibility.

In the development of an organization of the sort the work is generally best done by some one enthusiast who has the time and in whom all the necessary authority is vested. Often such work is accomplished by an enthusiastic salaried officer.

There is much for the A. A. A. to do that



it never has attempted. In another place in this paper is told of how much the Automobile Club of France has accomplished in the way of having fines and imprisonments commuted and remitted. No such interest in the individual automobilist has been shown here by any club or other body. There is room for and need of a great national organization of automobilists. The American Automobile Association now has the opportunity to become one. Will it rise to the occasion? If not, some other association will supplant it in popularity, and in this country popularity is power.

It is known that there has been considerable hesitation among those in control of the A. A. A. about opening the door to individual members, and the cause of the hesitation has been openly expressed as being a fear lest "we lose control." This is an unfortunate sentiment, and cannot co-exist with a true desire to extend the body into a democracy of automobilists. It is to be feared that some of this sentiment has crept into the amendments by which the door has been apparently thrown ajar. The club element now in power seems to be seeking to keep the reins of government. This is suggested by what may be an accidentally peculiar wording of the "representation" clause, but it looks more like the clever phrasing of a lawyer, to be used when occasion arises. The clause reads: "Each club shall be represented by one or more delegates, who shall be entitled to one vote for each active, associate and life member of the club represented, but no club shall be represented by proxy."

The prohibition of representation by proxy seems quite superfluous, since by that wording all that a club needs at any meeting of the A. A. A. is one member "who" shall be entitled to cast as many votes as there are members in his club. The use of the word "who" in the amendment is peculiar, and the giving of the clubs a representation as clubs in this way insures the full strength of their membership being polled at any time. This, under the present complexion of affairs, would insure the clubs keeping control and the governing influences remaining what they are. It is not that the present governing influences are objectionable, but an apparent planning for self-perpetuation will stultify any profession of democratic intent. It looks as if the door had been thrown open, but a strong hold kept on the knob, so that it may be partly or wholly closed to regulate the inrush. A glimpse of that autocratic hand on the

door knob may result in there not being any inrush.

### Tire Cost and Efficiency.

It was shown conclusively in the recent commercial vehicle contest—if it had not been sufficiently plain before—that the question of tires is a matter scarcely less important than the motive power.

The average business man, when he gives serious consideration to thought of replacing his horse equipment with automobiles, will want to know two things—first, what are the tires going to cost, and, second, are they going to be a source of worry and the cause of endless trouble? If assurances can be given him on both subjects he will, if he is at all conversant with the matter, heave a sigh of relief.

It is quite safe to say that the field is going to be divided between the inflated and the non-inflated tire. Equally indubitable is the assertion that the former will preponderate largely and that the latter will be of some more enduring substance than rubber. The solid rubber tire is essentially a compromise, and, like all compromises, it will obtain some favor, but not very much. It will occasionally be adopted by users who wish to free themselves from the liability of punctures and similar troubles, but who still retain the desire to be relieved from some of the vibration incident upon the use of steel or other metal tires.

For all except heavy trucks the pneumatic tire is well adapted and can be used to advantage. Its maintenance cost will be higher and its liability to go wrong greater than would be the case with a solid tire; that may readily be granted. But there are compensations that will quite balance this drawback. The superior speed of a vehicle so equipped, the absorption of the vibration so harmful to vehicle, machinery and even load, the reduction of maintenance cost represented by such items as repairs—in these respects there will be an actual saving of money. Should a tire puncture it means delay; but for every trip made without a puncture there is a credit to be made, and the experience of the contest shows that there would be many trips without a puncture, and that, even counting the time spent for repairs of such, the record would show decidedly in favor of the air tire.

If we turn to the heavy vehicle we can readily perceive that there is a limit beyond which pneumatic tires cannot go. The time comes when the game is not worth

the candle, when the mere cost of pneumatic tires durable enough to carry big loads would effectually preclude their being fitted. We know of one case where the cost of tires was figured out at \$1,500 a year; and here even that enormous expenditure might be justified if the speed of the vehicle could be increased to a sufficient extent. But it could not, and at a much slower pace—a pace that was quite possible with steel tires—the vehicle accomplished all that was expected of it.

But it is not only the excessive cost of pneumatic tires that stands in the way where vehicles carrying, say, from five to ten ton loads, are concerned.

There is a point reached finally where rubber, canvas and air will not do the work. The strain is too enormous, especially on Belgian block pavements, and something must give way. Tractive force plays its part, too, and even with steel or steel and lead tires, it becomes necessary to so distribute the weights that the wheels will bite when the power is applied and thus utilize that power in the propulsion of the vehicle and not simply in sliding the wheels. When the latter is done there is waste painful to behold.

The point where the usefulness of the pneumatic tire ends has not yet been determined with the accuracy that is to be desired. Obviously, it is where they cease to pay. But maintenance cost is not the only factor to be taken into the account, and each user of business vehicles must determine for himself when it exceeds the efficiency and celerity of the service obtained. Data can be, and will be, compiled as time goes on that will enable him to make his calculation, but in the end he must determine for himself just what is best suited to take his requirements.

It is queer how the drafters of such as the Bailey bill hope to reach the millionaire motorist, who, according to the motorphobes, laughs at all laws and tosses the price of fines to the winds. Such men never will be affected by laws that are no laws at all, that is, laws that are so clearly contrary to the spirit and the letter of the United States Constitution. Their burden falls not on the rich but on the relatively poor and humble who have not the wherewithal to appeal and to prove the unconstitutionality of measures of the sort.

Ordinary stove gasoline makes a fair substitute for .68, if the latter is not obtainable.

## OLDFIELD THE STAR

**Western Crack Gives Life to Empire City Meet and Makes New World's Record.**

Barney Oldfield made his metropolitan debut on Saturday last. He came from the West with a reputation as a daredevil—a reputation which his performance on the Empire City track last week amply sustained.

It was fortunate, indeed, that he was present. Without him the meet would have been almost as dull as dishwater, uninteresting runaways being the rule. Oldfield, however, left a vivid impression. He bore out the pictures of the newspaper "Red Devil." Wearing a flaming scarlet coat of red leather and seated bareheaded in his red 80-horse monster, he was, even at rest, a picture. In action he was a demon of imagination. He tore around the big mile track with a reckless abandon that compelled admiration, the deep bark of the exhaust of the four big cylinders suggesting a cannonade, and accompanied by belches of flame and smoke, it made a sight sufficient to strike terror to the timid and to deeply stir the strenuous. As a drawing card and as a sight to look upon Oldfield is worth his price.

The meet attracted all of five thousand spectators, and the most notable gathering of big touring cars ever seen in the metropolitan district. One count showed 219 of them present.

Both weather and track were all that could be desired. The lowering clouds and occasional spits of rain witnessed in the morning gave way, and, while the sky was not actually cloudless, yet the sun shone through the greater part of the afternoon. It was just warm enough to make exercise pleasurable, the air being bracing and invigorating. The track had been worked into a fair degree of smoothness, and its long, straight stretches and easy curves made easy going.

While not devoid of waits between the races, there was a noticeable absence of the excessive delays that have marked previous meets. The officials had the meet in hand, and ran it off in good time. Starting at 2:30, the last event had been run off at 5:30, and the big audience had started upon its homeward journey.

Mild ripples of excitement were caused by such incidents as the close shave of A. C. Bostwick's mecanicien, the setting of new record figures by Champion and the closeness of some of the events. Otherwise the spectators seemed to find plenty of amusement in strolling up and down the spacious lawns and in scrutinizing the parked cars and their occupants. The clubhouse presented its usual brilliant spectacle, being comfortable filled with handsomely gowned women and well groomed men. One woman was garbed in a close fitting leather suit,

with cap to match, and seemed to enjoy the attention she attracted.

The day's sport was opened by Mayor Walsh, of Yonkers, who fired the pistol shot for the first race, the one mile, open to all classes under 1,000 pounds. This resulted in an unexpected victory for an Orient buckboard, driven by George C. Gould, he defeating A. L. Nelden, in a Northern, in 2:05. The Northern had a good lead, but just before the finish was reached a defective spark plug gave trouble and enabled the Orient to nip it at the tape. Summary:

One mile, open to steam, gasoline and elec-

close to the rail that his mecanicien, Murphy, was caught unaware and forced against the fence, resulting in some bruises and a torn coat. Summary:

Three miles, open class for gasoline cars, 1,000 to 1,800 pounds; first prize, silver trophy, value \$100; second prize, silver trophy, value \$50:

1—Joseph Tracy, 35 H.P. Panhard.....3:50

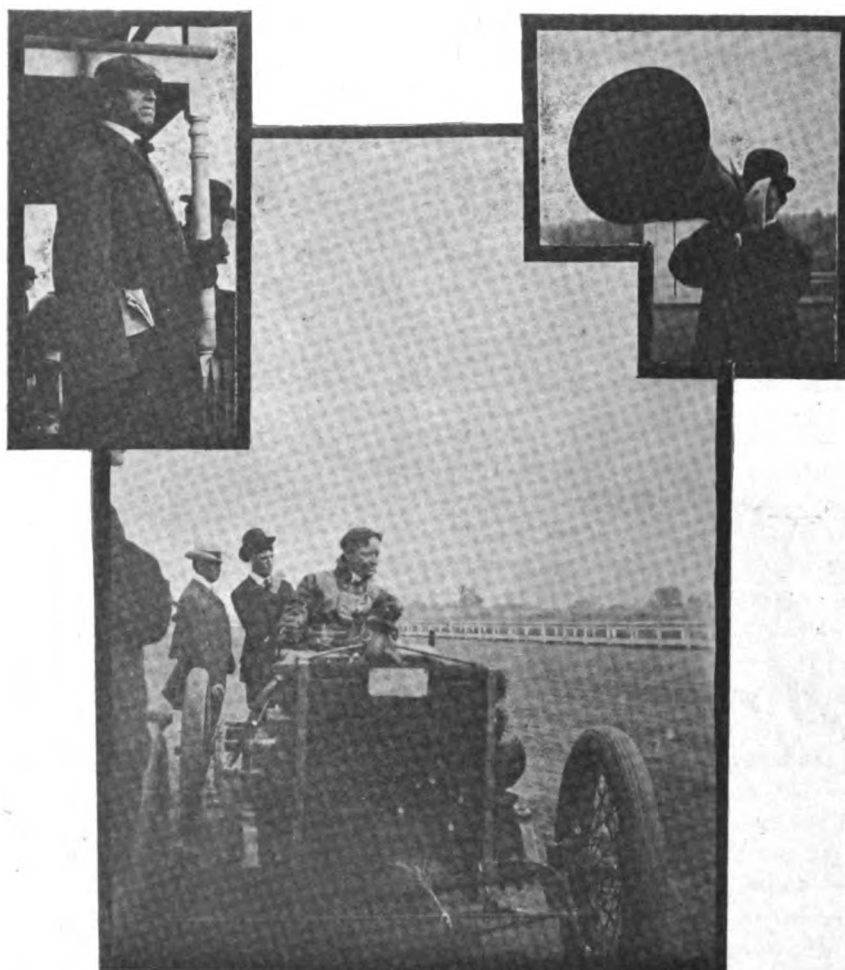
2—A. C. Bostwick, 18 H.P. Mercedes....

3—F. A. La Roche, 30 H.P. Darracq....

A fruitless victory was won by the Blair Panhard in the next race, for on Tuesday of this week it was announced that Referee A.

REFEREE PARDINGTON,  
New Chairman A. A. A. Race Committee.

THE ANNOUNCER.



OLDFIELD AND HIS RECORD-BREAKING CAR.

tric cars under 1,000 pounds; first prize, silver trophy, value \$100; second prize, silver trophy, value \$50:

1—George C. Gould, 4 H.P. Orient.....2:05

2—A. L. Nelden, 5 H.P. Northern.....

3—John J. Hickey, 10 H.P. Autocar....

Next came the three mile race for gasoline cars weighing between 1,000 and 1,800 pounds. J. I. Blair's Panhard, driven by Joseph Tracy, proved too much for A. C. Bostwick's Mercedes and F. A. La Roche's Darracq, and he was never in real danger. For a time, however, a keen struggle for second place took place between Bostwick and Le Roche, and in the end the former won out only after he had been forced so

R. Paddington had ruled that the Panhard was ineligible to the class. The latter was for gasoline cars weighing over 1,800 pounds, and, as the Blair car weighed only 1,650 pounds, the curious spectacle was presented of a car deemed not speedy enough for the class winning it with comparative ease.

Bostwick took the lead at the start, and soon looked like a winner. Before half of the five miles were traversed, however, the Panhard took a big brace and overhauled and passed the Mercedes. L. Markle, in a Mors, was compelled to bowl along in third place from start to finish. Summary:

Five miles, open class for gasoline ma-

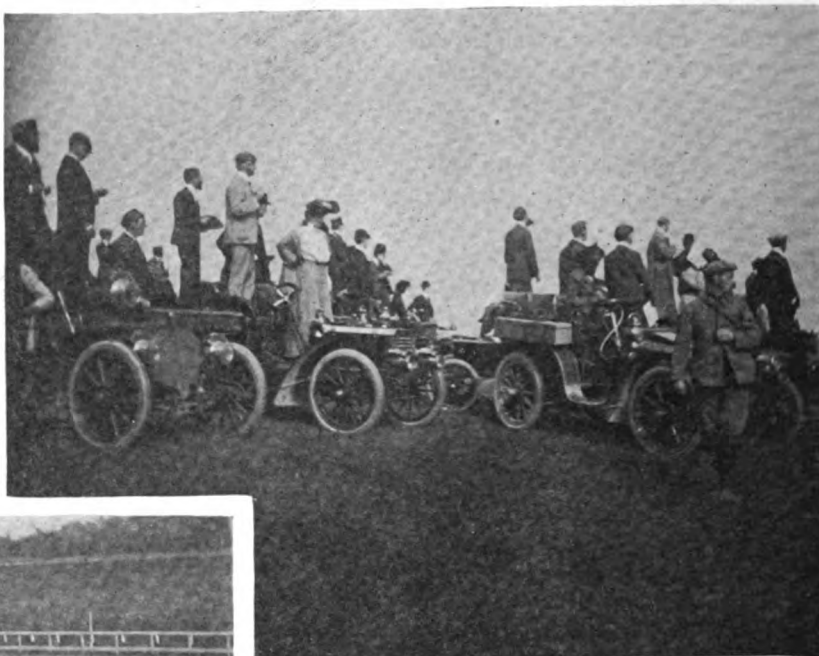
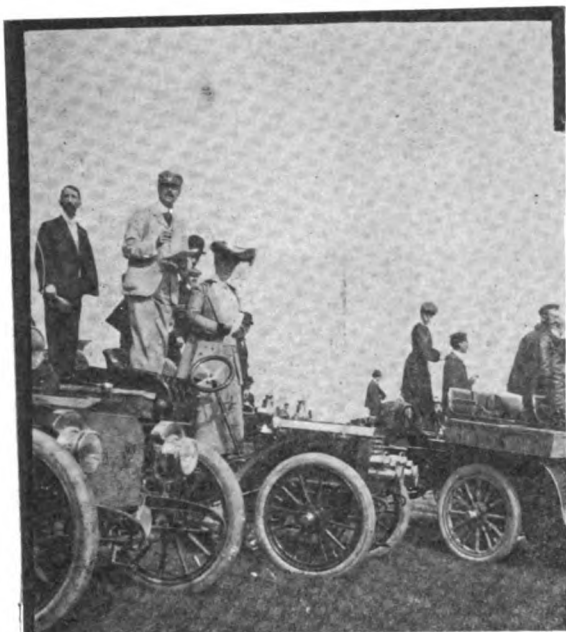
chines over 1,800 pounds; first prize, silver trophy, value \$100; second prize, silver trophy, value \$50:

- 1—Joseph Tracy, 35 H.P. Panhard.....6:23
- 2—L. Waterbury, 40 H.P. Mercedes.....
- 3—L. Markle, 18 H.P. Mors.....

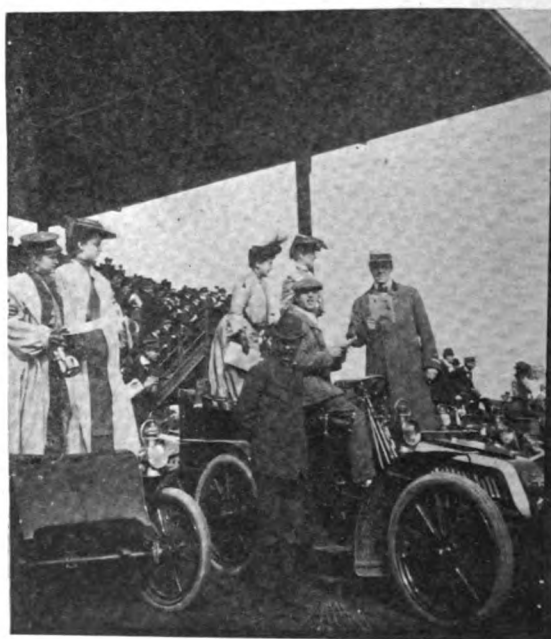
The subsequent disqualification of the

Oldfield gained steadily, had pulled up at even two miles and was ahead at three. Thenceforth it was simply a matter of how much lead he would obtain, and this turned out to be slightly less than one-quarter mile. The time was slow, and the heat aroused absolutely no enthusiasm.

the Empire City mile track bothered him on this account, and he rode on the outside of the track for the greater part of the distance, keeping so close to the rail that it seemed as if he would touch it. It was plain that he was making marvellous time, and the announcement that the second mile



SOME VIEWS OF THE SPECTATORS.



Panhard gave first place to the Mercedes and second to the Mors.

The first heat of the Oldfield-Wridgway match race—the piece de resistance of the meet—proved to be very tame. Wridgway got away the quicker, the start being a standing one, from opposite sides of the track, and gained perhaps 100 yards in the first mile. From that point on, however,

The second heat showed a vast difference. Oldfield and his car seemed to wake up, while Wridgway did a little worse than the first time. At the end of the first mile Oldfield had gained a commanding lead, which in the second or record-breaking mile was much increased. Thenceforth all eyes were turned on the flying Westerner and his huge, differentialless car. Even the easy turns of

was covered in 1.013-5, breaking all track records, was received with tumultuous applause. At the finish Oldfield was surrounded by a score or more of motorists anxious to congratulate him, and was warmly commended for his fine ride. Summary:

Special Match Race—Barney Oldfield, Toledo, Ohio (Ford 80 h. p. car), vs. C. G. Wridgway, New York (Peerless 40 h. p.

car), best two in three heats, 5 miles, starting from opposite sides of track.

First heat won by Oldfield, time 7.02½; Wridgway second, time 7.13.

Second heat won by Oldfield, time 5.31. One mile, 1.14 2-5; two miles, 2.16; three miles, 3.21; four miles, 4.26 4-5; five miles, finish, 5.31; Wridgway's time, 7.30. Time of second mile, 1.01 3-5, is world's record on circular track.

One false start was made in the five-mile motor bicycle race, but on the second attempt the broad line of contestants were sent off in good order. One hundred yards had not been covered before the Curtiss entry, the two-cylinder Hercules motor bicycle, had forced itself well in front and was setting a fast pace. Just as quickly the field strung out, the Indian bicycle, ridden by Holden, being the only one that was able to come anywhere near holding its own with the flying Hercules. Before three miles had been covered Curtiss had lapped the tail-enders, and from that point on he picked them up one by one. Holden stuck grimly to his task, however, and managed to finish about one-quarter of a mile behind the leader, with F. W. Rogers, also on an Indian, third. Summary:

Five Miles—Motor Bicycle Amateur Championship of America. Prizes, gold, silver and bronze medals.

1. G. H. Curtiss, 5 h. p. Hercules, 6.34.
2. Geo. N. Holden, 1¼ h. p. Indian.
3. F. W. Rogers, 1¼ h. p. Indian.

Albert Champion gave a fine exhibition of riding against time on a four-cylinder, 10 h. p. Clement motor bicycle. His first mile was done in 1.04½, displacing the previous record—his own—of 1.12 2-5. Continuing, he finished the five miles in 5.35. Summary:

Five Mile Exhibition by Albert Champion, of Paris, with four-cylinder, 10 h. p. Clement motor bicycle; time, one mile, 1.04 1-5; two miles, 2.09 4-5; three miles, 3.15 2-5; four miles, 4.21 4-5; five miles, 5.35. The time for the first mile is world's record.

The events wound up with a series of trials against time, a silver trophy being awarded for the fastest mile and medals for records in the different classes. Summary:

Mile Record Trials—Open to all cars. Silver trophy for the fastest mile, and a medal in each class to the contestant who lowers the existing track record for the class to which his car is eligible.

1. A. W. Bright, 60 h. p. Mercedes, 1.07.
2. Jos. Tracy, 35 h. p. Panhard, 1.16.
3. L. Waterbury, 40 h. p. Mercedes, 1.12.

The officials were as follows: Referee, A. R. Pardington; judges, George Isham Scott, L. R. Adams, C. Arthur Benjamin; timers, S. M. Butler, Frank G. Webb, M. J. Budlong, Roland Douglass; clerk of course and starter, A. J. Pickard; assistant clerk of course, P. J. Fisher; umpire, Frank Eveland; announcer, Peter Prunty.

In replacing the tube of a detachable tire care should be taken to see that it is not pinched by the outer cover.

## DAYTON DELIGHTED

### Ten Thousand People Attend Race Meet and Vote it a Great Success.

Ten thousand people had their first sight of automobile racing at Dayton, Ohio, on May 30, and gave it their unqualified indorsement. They gazed with keen interest at the competing gasoline and steam vehicles, and applauded vociferously when, as in two or three cases, the finishes were close and exciting. The various classes filled sufficiently well to make good competition, and although no remarkable time was made the lack of it caused no dissatisfaction.

The meet was the first annual of the Dayton Automobile Club, and was held at the Fair Grounds. The weather was ideal, and this and the holiday caused an outpouring that simply swamped the grandstand, thousands being obliged to seek the best places obtainable in the field. So encouraged were the club officials by the great attendance and the hearty applause that there is every prospect of another meet being held this season.

F. P. Hilt and C. J. Wagner each won two races, the latter being motor cycle events. The three-mile race for heavy gasoline cars proved the event of the day, Hilt beating out Kiser in a driving finish that brought the crowd to its feet in a frenzy of excitement. This was the only very close race of the day.

The summary follows:

Two miles, for electric vehicles—First, George G. Peckham; second, Charles Roney. Time, 6 min. 54½ sec.

Three miles, for gasoline cars under 1,000 pounds—First Harold Talbot; second, Dr. Lounsbury; third, George F. Andrews. Time, 7 min. 55 2-5 sec.

Three miles, for gasoline cars between 1,000 and 2,000 pounds—First, J. V. Dickson; second, J. W. Small. Time—6 min., 7 sec.

Five miles, for motor cycles—First, C. J. Wagner; second, Charles Roney. Time—9 min. 18¾ sec.

Three miles, for gasoline cars weighing 1,500 pounds—First, J. W. Small; second, Harry Cappell. Time—5 min., 57 sec.

Five miles, open to all classes—First, Earl H. Kiser; second, Edward Borderwisch. Time—8 min. 25 sec.

Two miles, for motor cycles—First, Chas. J. Wagner; second, Charles Roney. Time—3 min. 27 1-5 sec.

Three miles, for gasoline cars weighing 2,000 pounds—First, F. P. Hilt; second, E. H. Kiser. Time—5 min.

Unlimited pursuit race—First, F. P. Hilt; second, J. F. Dickson. Time—8 min.

Two miles, match race—First, Dr. A. F. Bowman; second, Howard Talbot. Time—5 min. 2 2-5 sec.

A half-mile exhibition motor cycle race was made by Charles Roney in 45 1-5 sec.

Races Nos. 11, 12 and 14 were declared off.

The following officers were in charge: Referee, Otto Baumann; assistant referee, J. A. Haas; announcer, John R. Flotron; clerks of course, Richard Virschnell and John A. McGee; timers, George Shroyer, John Rock and Charles Hall; judges, Earl Forrer, E. F. Platt and Victor J. Obenauer.

### Tourists Cars in Canada.

The report that the Canadian edict against tourists' automobiles has been modified is now confirmed. The text of the order issued by the Department of Customs is as follows:

"Automobiles, not new, in use by tourists coming temporarily into Canada and not domiciled in Canada, may be delivered upon deposit of an amount equal to duty, subject to refund upon exportation within the time prescribed by the collector, not exceeding six months from date of arrival. The automobile is not to be used for gain or hire in Canada, and an invoice showing the selling price thereof should be produced to the collector of customs as an aid to him in determining the amount of the deposit required."

### Rain Caused Double Postponement.

Misfortune pursued the Indianapolis automobile race meet promoters on Decoration Day, for the hard rain of Friday night and Saturday morning left the Fair Grounds track in such a muddy condition that it was decided to postpone the events until Monday. Again Jupiter Pluvius was unkind, however, and drenched the grounds so that it was impossible to hold the races. After a brief consultation a second postponement was decided upon. This time Saturday, June 13, was selected as the date for the run-off.

### Morris Flies to Albany.

Remarkable time between New York and Albany is claimed to have been made on Saturday last by Dave Hennen Morris, of the A. C. A., in a 60 h. p. car. Leaving this city at 2 o'clock in the afternoon, the Hotel Ten Eyck, Albany, was reached at 7.10. Allowing for stops, the 172 miles is said to have been covered in 4 hours and 10 minutes running time.

### French Club's Concern for Members.

The Automobile Club of France, at different times during the last few years, has had the penalties imposed upon 250 motor car users commuted, while other sentences, amounting in all to 500 days' imprisonment, were entirely rescinded through the intercession of the club. This is a good record for emulation by the A. C. A.

Following the example given by the Nord Railway Co. (France), the Orleans Co. have decided to establish a service of automobiles on rails on its branch and auxiliary lines. The Paris-Lyons-Mediterranee Co. are also contemplating a similar innovation.

## ADMITS INDIVIDUALS

**Can Join A.A.A. on Payment of \$1.—Pardington Chairman of Race Committee.**

At last the American Automobile Association has carried out the idea of opening its doors for the admission of individuals, and in doing so has made the welcome a wide one, the thought being, apparently, that any one having sufficient interest in automobilism to apply for admission and pay the dues will be a satisfactory member.

The meeting at which this proposed plan was finally made operative was held at the Automobile Club of America in New York on Tuesday. Present at the meeting were: President Julian A. Chase, M. D., of the Rhode Island Automobile Club; W. E. Scarritt, Automobile Club of New Jersey; Harlan W. Whipple, Automobile Club of America; A. R. Pardington and Frank G. Webb, Long Island Automobile Club, and W. J. Morgan, Florida East Coast Automobile Association.

Several amendments to the constitution were adopted, the one that inaugurates the open door policy reading as follows:

"American automobile clubs, exclusively devoted to automobilism, individual owners and those in any way interested in the sport shall be eligible for membership."

Then, in order to insure equality in the dues and the representation basis, the following were adopted:

"Each club shall be represented by one or more delegates, who shall be entitled to one vote for each active, associate and life member of the club represented; but no club shall be represented by proxy.

"Each individual member shall be entitled to one vote at any regular or special meeting of the association.

"The dues for individual members shall be \$1.00 per annum, payable in advance on the first day of April in each year."

It was the sentiment of the meeting that the adoption of these amendments should be followed up by the institution of an aggressive recruiting campaign, and it was resolved to issue blanks for membership application and distribute them everywhere.

At a meeting of the A. A. A. directors, attended by Dr. Chase, W. E. Scarritt, A. R. Pardington and F. G. Webb, the resignation of W. J. Stewart, chairman of the racing committee, tendered because of ill health and business demands, was accepted, and A. R. Pardington was appointed to fill the vacancy.

### A Motor Garbage Cart.

An automobile truck having a capacity of eight tons is to be given a trial by the Brooklyn Street Cleaning Department as a conveyance for garbage. Should it work satisfactorily more will be installed. The maker of the truck calculates that it will do the work of two or three horse drawn vehicles.

## New Jersey's License Mill.

On May 30 the New Jersey Secretary of State had issued just 2,200 automobile licenses, and applications are being received at the rate of forty per day. So far, 50 per cent. of the applications have been from New York and Philadelphia motorists; the remainder is pretty evenly distributed over New Jersey. Among the prominent millionaires to whom licenses have been granted are John D. Rockefeller, John Jacob Astor, H. O. Havemeyer, Jr., Charles M. Schwab and Robert Walton Goulet of New York, and P. A. Widener of Philadelphia. Sixty per cent. of the registered automobiles are of the runabout type. While most of these licenses are granted to men as owners, there are many licenses to women. On Wednesday of last week the thirty-three applications received were entirely from women.

The average horse-power of registered automobiles, outside of touring cars, is 6 horse-power. The great majority of machines are of American make, while the touring cars are nearly all French or German make.

There is no indication of a falling off in license requests, and the great influx of people into Atlantic City and other resorts this summer is expected to raise the number of licenses issued above forty per day.

### Keene's Place on German Team.

A new interest of a peculiar sort for Americans has been lent to the Gordon Bennett Cup race by the action of the German Automobile Club in appointing a prominent American like Foxhall Keene to be one of its representatives on the German team. The victory, if won by Keene, would undoubtedly go to the credit of the German club and the Mercedes company nominally, but inasmuch as it is recognized that it is as much a question of ability on the part of the operators as on that of the cars, it is a question if such a victory would not be a divided triumph for the Germans, that would admit this country for a share of the glory. Foxhall Keene is undeniably a very expert operator, and with a good Mercedes car in his hands he is likely to be a dangerous factor in the race.

The German team, as it has been officially announced, now stands: Baron de Caters, Foxhall Keene and M. Hieronimus.

### Automobile Parade Opens Celebration.

In connection with the "Old Home Week" which is to be celebrated in Bridgeport, Conn., beginning August 31, an automobile parade will be held, starting at 10 a. m. on the day named. The Automobile Club of Bridgeport has appointed a committee to take charge of the affair, A. L. Riker being chairman, and W. S. Teel, jr., secretary.

Prizes will be awarded for the best decorated automobile, and efforts will be made to have all nearby motorists participate.

The new Napier Bennett Cup racers have shaft transmission and live rear axles.

## DISQUALIFIED WINNER

**Car was Under Weight, and Referee Held it was not Eligible to Class.**

An interesting precedent has been established by a decision of A. R. Pardington, who was referee at the race meet held at the Empire City track last Saturday. The question was the eligibility of J. Insley Blair's Panhard, which weighs less than 1,800 pounds, to compete in the race for cars weighing more than that. Mr. Blair's Panhard, driven by Joseph Tracy, did this at the meet and won the race. Mr. Pardington has since decided that the car was not eligible, and it has been disqualified. The first prize for the five-mile open, for cars over 1,800 pounds, will therefore go to Lawrence Waterbury's Mercedes, and the second prize to Lafayette Markle's Mors.

The silver trophies offered as prizes are being engraved and will soon be ready for the winners.

This decision is a peculiar one, because it is customary with yachts, horses and athletes to permit them to compete out of their class in a higher class, if they so desire; but according to the ruling made automobiles may not do this.

### The Law as to Licenses.

Under the Bailey law, signed by Governor Odell on May 15, automobilists in New York State have until the 14th of this month in which to register their vehicles with the Secretary of State, and obtain a license, and chauffeurs have until the same date to file their papers and obtain a license to operate. As explained in The Motor World of May 21, numbers on the cars are now necessary, instead of initials. The number issued by the Secretary of State must be painted three inches in height, and black on a white ground, carried on the rear of the cars. The registration certificates must be carried at all times by owners and operators, and on demand must be shown to any peace officer.

### Pittsburgh's 1500 Mile Tour.

A tour of nearly 1,500 miles is planned by Dr. W. C. Cook, of Pittsburgh, Pa., who with his wife and daughter will drive from the Smoky City to Boston and return. The start will be made on June 12, and the outward trip will be made via Buffalo, Albany, Springfield and Worcester, a distance of 720 miles. Returning, Dr. Cook will drive to New York and Philadelphia, thence across Pennsylvania to Pittsburgh.

### Overcaution and Recklessness.

"The successful driver must go cautiously, but not too cautiously," Jarrott, one of the British Bennett Cup race team is quoted as saying. "The overcautious man never wins, while the over-reckless man never finishes."



## NEW RECORDS BY STEAMER

**Stanley "Turtle" Beats Cannon's "Bird," and Does a Mile in 1.02 4-5 at Readville.**

A new track record for steam carriages that is quite as sensational as is in appearance the vehicle that made it was one of the results of the races held at the Read-

ville track on Decoration Day, under the auspices of the Massachusetts Automobile Club. The new record is that of a mile in 1.02 4-5, and it was made by a light racer built by the pioneer of steam motor car makers, F. E. Stanley.

The builders and owners of the cars oper-

ated them, and, considering the age of Mr. Stanley and his limited experience in negotiating racetracks, the style in which he shaved the corners was remarkably clever. The heats were not run in the form of a true race, but that of speed trials, the cars

track was not in the best of condition, being very rough in both the turns and the stretches, and it was generally conceded that under more favorable conditions the Stanley car would do a mile in a minute or better. Summary:

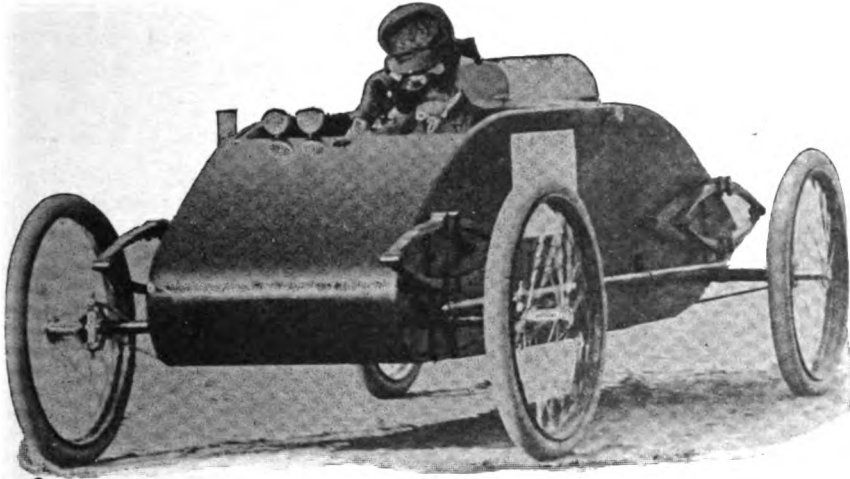
Special race for steam vehicles between George C. Cannon's 35 horse-power special and F. E. Stanley's 25 horse-power special; one mile, time trials, in heats.

First trial, dead heat. Cannon, 1.06; Stanley, 1.06.

Second trial won by Stanley. Time, 1.02 4-5, world's record. Cannon's time, 1.04 2-5.

Ten thousand automobile enthusiasts attended the races, and it was one of the most fashionable gatherings seen in years in the vicinity. The crowd completely filled the grand stand and bleachers, and fully 2,000 spectators stood on the lawn and enclosure. It was the largest gathering of automobilists ever held in New England. Nearly 600 vehicles crowded the infield and various points of vantage around the track. It is estimated that the number of vehicles represented \$1,250,000 in value. All sorts of motor conveyances, from motor bicycles and Orient runabouts to the most expensive touring cars, were on hand.

Next in interest to the record-breaking run of the Stanley "Turtle" was the sweepstakes event, at three miles, for winners, in which Harry Fosdick, with his 20 h. p. Winton, and Fred Durbin, with his Stanley car, made an exciting finish of it, as shown by the picture taken as they were crossing the tape. Durbin and Fosdick had each won two prizes prior to the sweepstakes, and were the only competitors who had done so. Durbin had won the three-mile race for stock steamers, and also the five-



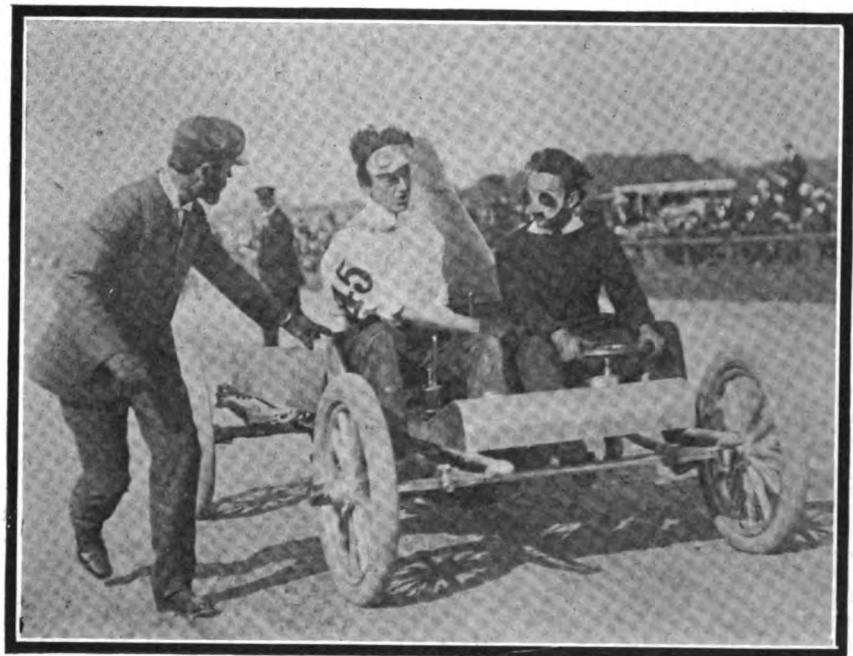
THE STANLEY STEAM "TURTLE."

ville track on Decoration Day, under the auspices of the Massachusetts Automobile Club. The new record is that of a mile in 1.02 4-5, and it was made by a light racer built by the pioneer of steam motor car makers, F. E. Stanley.

The race in which the record was made was the event of the day. It was to have been a special three-sided contest, at ten miles, between a Cannon, a Grout and a Stanley car, but the Grout Brothers announced their withdrawal, and the event was changed to a one mile heat race between the Cannon and Stanley carriages. George C. Cannon, the Harvard student, and his racer of last year, which performed a mile in 1.05½ at Providence, on Sept. 24, are well known, but he appeared on last Saturday with a new creation, of which he confidently predicted a mile in a minute. On this new car the steersman and his helper do not sit tandem, as on the 1902 machine, but side by side in front, with their legs partly hidden by a gasoline tank that runs across the front of the car. The racer looks somewhat like a runabout stripped, but sticking up behind it is the same style of boiler and smokestack, resembling a blacksmith's forge, that was the distinguishing feature of the Cannon car of last year. It is of thirty-five rated horse-power.

It was known that Mr. Stanley had been working to produce a mile-a-minute car, but no one expected to see the sort of vehicle that was brought forth for the race. It reminded one of the freak bodies made by Serpollet for his racers; in fact, it is not unlike the Serpollet "whale" which was used in the Nice race of 1902, only lower and broader. In a way, the new Stanley steamer looks like an inverted bath tub,

going out one at a time. The first trial resulted in a dead heat, both Cannon and Stanley covering the mile in 1.06. On the second trial Cannon made 1.04 2-5, his quarters being clocked as follows, 16 1-5, 33 2-5, 48, 1.04 2-5. Then Mr. Stanley went out and made his world's record. His fractional times were, 16, 31 1-5, 46 2-5, 1.02 4-5. The



STANLEY SIZES UP THE CANNON CAR.

mile open event for steam carriages, while Fosdick had won the five-mile race for heavy gasoline cars, and also the pursuit race against Kenneth Skinner. Summary: Sweepstakes for winning vehicles, three miles.

1. Harry Fosdick, Winton, 20 h. p.; time, 4.43.

2. Fred Durbin, Stanley, 5½ h. p.

The other events were for the most part

too much in the nature of processions to be interesting. The Invitation race was for the club championship, and it was captured by a steamer. Summary:

Five-Mile Invitation Race, for Massachusetts Automobile Club Championship.

1. J. H. McAlman, Locomobile, 5½ h. p.
2. L. R. Speare, Winton, 20 h. p.

Time, 7.56 3-5.

The open race for steamers was in the nature of a walkover for Durbin. J. B. Jay, the only other competitor, had trouble with his car and was forced to withdraw. Durbin won the race by running one mile. Other summaries follow:

Three miles, for stock steam vehicles. First prize, value \$100; second prize, value \$50.

1. Fred Durbin, Stanley.
2. F. A. Hinchliffe, Locomobile.
3. Lewis Ross, Stanley.
4. J. B. Jay, White.
5. James Hillyard, Stanley.

Time, 4.22 3-5.

Five miles, motor cycle. First prize, value \$50; second prize, value \$25; third prize, value \$10.

1. J. Derosier, Indian.
2. F. C. Hoyt, Indian.
3. Joe Downey, Orient.
4. F. Tudor, Orient.

Time, 6.54 1-5.

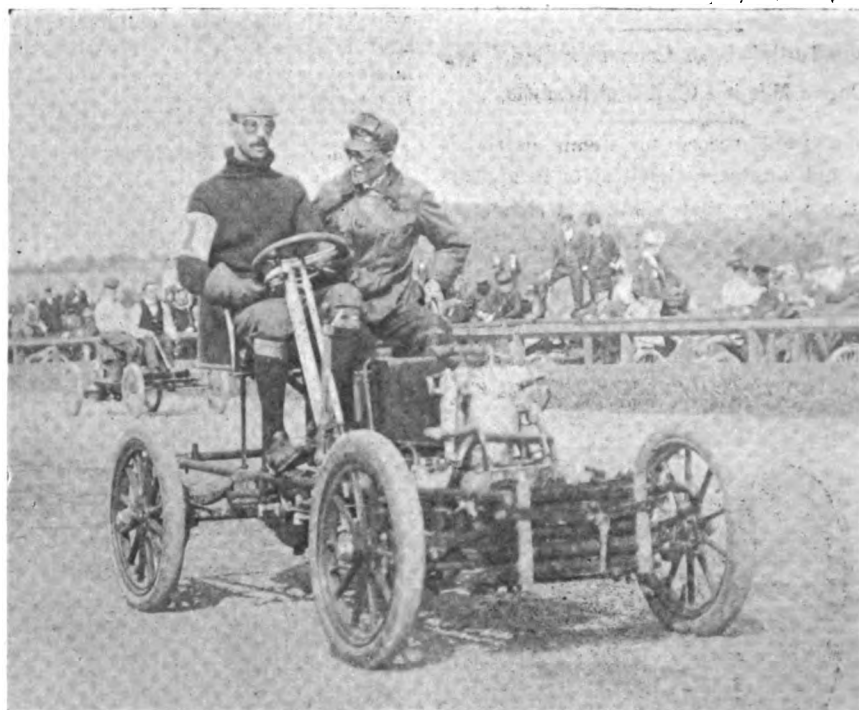
Five miles, for gasoline cars 1,000 pounds and under.

1. H. V. Chamberlain, 16 h. p. Darracq.
2. L. H. Roberts, 4 h. p. Orient buckboard.
3. William Jameson, 4 h. p. Orient buckboard.

4. A. R. Bangs, 12 h. p. Franklin.

Time, 9.08.

Five miles, for gasoline cars over 1,000 pounds and under 2,000 pounds. First prize, value \$100; second prize, value \$50.



10 H. P. DARRACQ, WINNER OF 1000 LBS. CLASS.

1. J. L. Snow, 20 h. p. Peerless.
2. K. A. Skinner, 15 h. p. De Dion.
3. Harry Fosdick, 20 h. p. Winton.
4. F. Tudor, 15 h. p. Winton.

Time, 7.58 3-5.

Five miles, for gasoline, over 2,000 pounds.

1. Harry Fosdick, 20 h. p. Winton.

2. J. L. Snow, 15 h. p. Peerless.
3. George G. Reed, 20 h. p. Stearns.

Time, 7.42.

Special Unlimited Pursuit Race, Distance, 9½ miles.

1. Harry Fosdick, 20 h. p. Winton.
2. Kenneth A. Skinner, 15 h. p. De Dion.

Time, 12.56 4-5.



FOSDICK WINS THE SWEEPSTAKES BY A NARROW MARGIN.

## BANQUET CUP TEAM

**Prior to Departure for Ireland, Winton and Mooers are Feasted and Toasted.**

A rousing sendoff was given to two of the members of the American Bennett Cup Race team last week, when the Cleveland Automobile Club banqueted Alexander Winton and L. P. Mooers. Percy Owen, the third member of the team, had been invited, but was unable to attend.

The banquet took place at the Hollenden, and twenty-nine persons sat down at the

## Quandary of C. G. Dinsmore.

What is alleged to be an equivocal position occupied by Clarence Gray Dinsmore is causing discussion in England. Mr. Dinsmore is the representative of the United States on the International Committee having the Cup race in charge, and yet is said to be the owner of one of the three Mercedes cars entered for the race. It is claimed that a dual position such as this may cause a protest to be made against the car owned by Mr. Dinsmore.

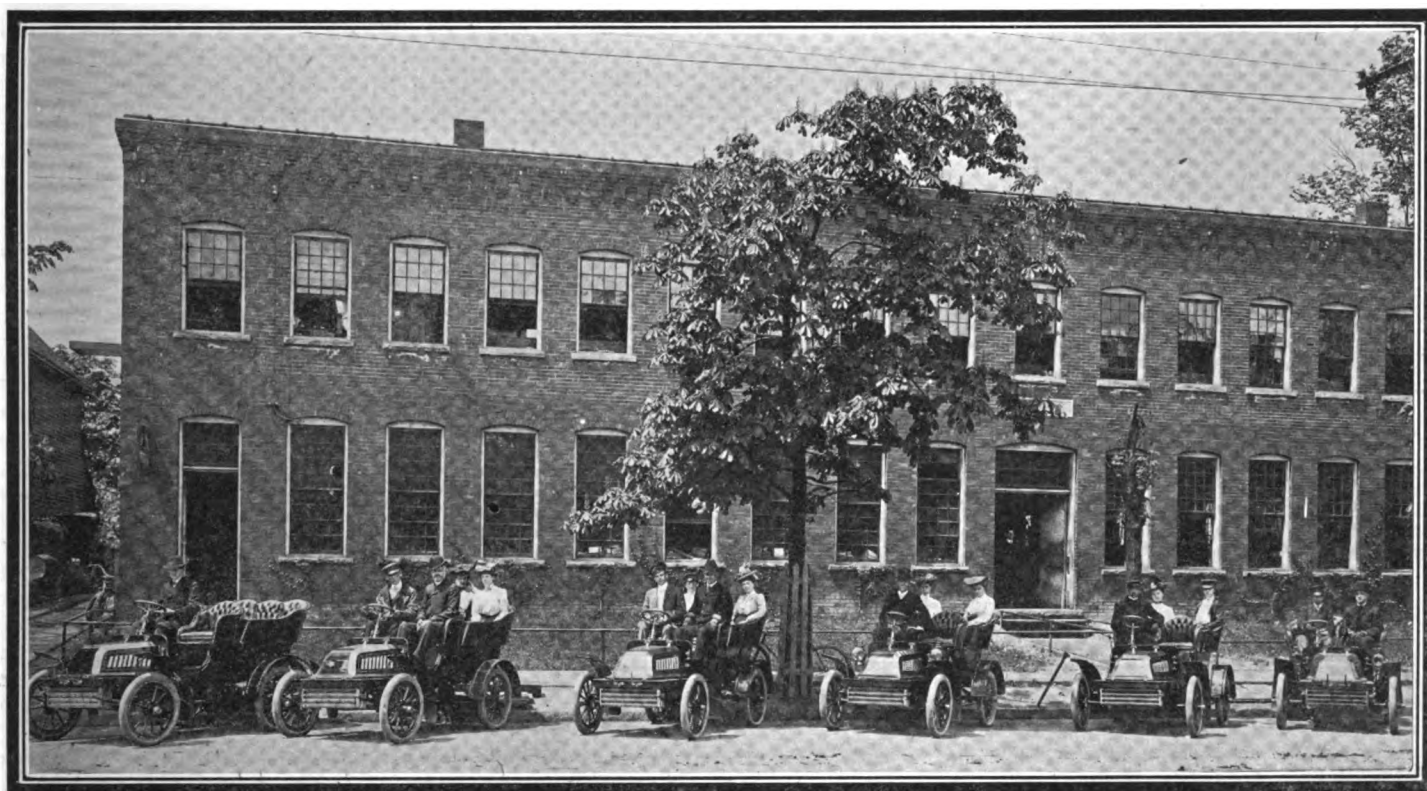
## Winton and Owen En Voyage.

Alexander Winton and Percy Owen and their party sailed last Saturday on the Cam-

## WRIDGWAY TO GO ?

**Ill Health may Prevent Mooers' Participating in the Bennett Cup Race.**

A rumor from Cleveland has reached New York to the effect that Mr. L. P. Mooers is not in perfect health and may feel compelled to abandon the plan of competing in the race for the Bennett Cup. In case Mr. Mooers should be unable to go, it is likely that the Peerless Company will nominate C. G. Wridgway, of New York, as a substitute.



A CORNER OF THE THOMAS FACTORY AND SOME OF ITS PRODUCT.

tables, which were arranged in the shape of a T and tastefully decorated with roses. E. Shriver Reese, of the Cleveland club, acted as toastmaster. He stated that in case victory should perch on the banner of this country, a delegation of the club would be at New York to welcome the returning Argonauts and to help carry the cup to Cleveland.

Those present were: Alexander Winton, L. P. Mooers, E. Shriver Reese, John Hartness Brown, Thomas E. Rook, E. E. Schwarzkoff, George Collister, Walter C. Baker, Charles B. Shanks, W. F. Sayle, J. C. Trask, L. D. Schoenberg, William McKay, Thomas Henderson, Leo Mellonoski, Charles T. Draper, H. P. Dyer, Clarence M. Brockway, L. H. Hoffman, A. W. Schawacker, P. L. Hussey, L. H. Kittridge, W. H. Kirkpatrick, Frank L. Harding, Frank C. Gates, John A. Carter, Rollin White, Fred S. Barton and Forrest E. Taylor.

pania, as scheduled, to take part in the Gordon Bennett Cup race. Mrs. Winton accompanied her husband, and Mr. Owen escorted his two sisters, who were bound for a European tour. Mr. Z. Davis, one of the Winton company directors, was of the party. The "Bullet" was not taken. The two new racers and a touring car were shipped on the St. James a week previous.

## In the Land of the Aztecs.

An automobile club has been organized in the City of Mexico for the purpose of "furthering automobile sports all over the country and to encourage the construction of good roads." Minister of Finance Jose Ivez Limantour will be honorary president of the club.

It is advisable for the newly fledged motorist to practise on the brake, and learn to estimate both distance and the speed of the car accurately before using it in crowded thoroughfares.

Mr. Wridgway was seen by a Motor World representative and asked if he was going to the cup race. He replied that he did not know, but added that he would not care to go unless he was the operator of the racing car. He said that he would be willing to run the car in case Mr. Mooers was unable to go, and he seemed pleased at the prospect of having an opportunity to get into the big race. By others who are supposed to know it is considered to be as good as settled that Mr. Wridgway will be the driver of the Peerless entry in the race. There has been some talk of Barney Oldfield being substituted for Mr. Wridgway, but Mr. Oldfield could not drive in the race unless he was first elected a member of the Automobile Club of America.

Dr. H. Nelson Jackson, of Vermont, and S. K. Croker, of Seattle, left San Francisco, Cal., last week in an automobile, en route for this city.

## MOTOR CARS AID CHURCH

**A Novel Scheme run for Sweet Charity's Sake  
by W. E. Scarritt at East Orange.**

A new way in which to make automobiles serve "sweet charity" was devised for the residents of East Orange, N. J., and put into effect there on Decoration Day by Winthrop E. Scarritt, vice-president of the Automobile Club of America. It was popularly known as a trip around the world by automobile with four stops, but the official programme designated it with more accuracy as "A Specially Conducted Excursion Between the Famed Cities of London, Paris, Berlin and Tokio." The trip was on the "All Automobile Route" of the "Globe and East Orange Transportation Co."

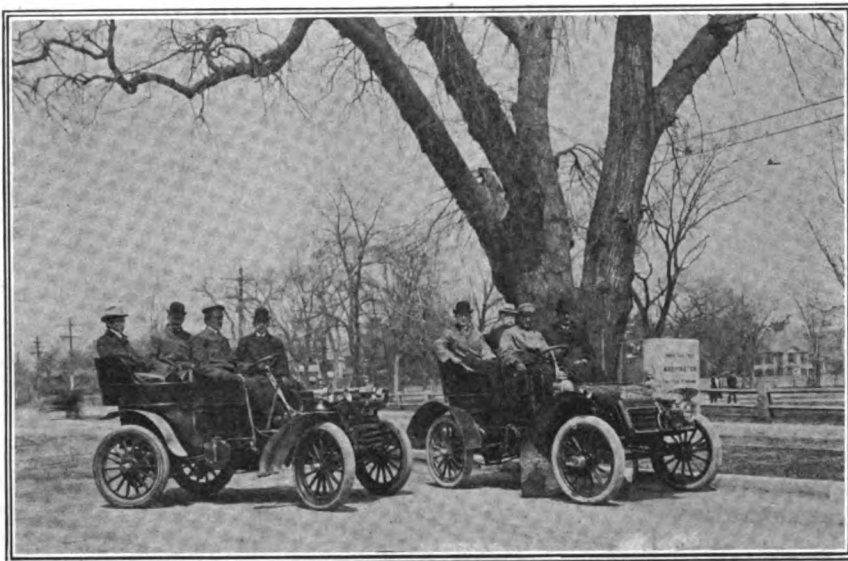
The whole thing was gotten up as a bene-

German costume. Paris was the residence of Mr. and Mrs. Isaac H. Searles, No. 145 North Arlington avenue, and Tokio was at Mr. and Mrs. Scarritt's house, No. 44 Munn avenue. Here two Japanese women and a diminutive Japanese boy served tea. The last stop was in London, which was the residence of Mr. and Mrs. George F. Park, No. 121 North Walnut street.

### Under the Washington Elm.

One of the show places of Cambridge, Mass., is the historic old Washington elm at the head of aristocratic Brattle street. Here General Washington took command of the Continental forces, and proceeded to invest the British troops who were in possession of Boston.

Under this venerable relic of the Revolution two Packard cars, each with a distinguished party on board, are shown. The photograph was taken just after Harvard



TWO PACKARDS ON HOLLOWED GROUND.

fit for the Calvary Methodist Church, and the exploit is full of suggestion as to the uses to which automobiles may be put in suburban districts.

The church, at Main and Walnut streets, was called the Grand Central Station, and four houses in various parts of the Oranges were each designated by the name of some city and decorated accordingly, with young women in national costume to receive the visitors. At each city a stop was made by the automobiles, and the occupants, after greeting the reception committee in the house and enjoying slight refreshment, passed on to the next city and then around to the Grand Central Station.

Tickets with four stopovers were sold at the Grand Central Station, where there were a newsstand, at which a "Baedeker" guide of the trip was sold, a railroad restaurant and a room for checking baggage, the latter being in charge of Bishop Bowman.

The first stop was at Berlin, the residence of Mr. and Mrs. W. B. Wilson, No. 59 South Maple avenue, where Mrs. Wilson and several friends received the tourists, clad in

College—only a stone's throw away—had been visited by a number of members of the Middlesex Club, of Boston, and their guests, during the recent Grant celebration. In the first car, directly under the elm, are Lieutenant Governor Gordon of Ohio and Major Dwyer, of Boston, seated in the tonneau. Judge Kennedy, of Newton, is on the front seat, with Robert Ross at the wheel. In the other tonneau are Congressman Joseph C. Manning, of Atlantic City, Ala., with John W. Cross, of Brookline, Mass. E. H. Shattuck is on the front seat with the operator.

Many of the points of interest in and around Boston and Cambridge were viewed on this occasion, the two Packard cars proving their great superiority for sight seeing purposes by the expeditious manner in which they were driven from place to place.

The House Committee on Ways and Means has reported the Higginson automobile bill without change. It provides for speeds of 10 and 15 miles in Massachusetts.

## ORGANIZATION EFFECTED

**Newark Motorists Meet, Select Name and  
Adopt Constitution for New Club.**

In pursuance of the power vested in it, the committee on organization appointed at the meeting of Newark, N. J., motorists on April 30, called another meeting last week and submitted a report of its labors. Some fifty persons attended, and a temporary organization was effected, temporary officers elected and a name—the New Jersey Automobile and Motor Club—decided upon.

The meeting was held at the rooms of the Newark Board of Trade, and was presided over by Richard C. Jenkinson, who issued the original call.

Dr. H. C. Harris, chairman of the committee appointed for the purpose, presented a constitution and by-laws, which were adopted except for part of one section.

The objects of the new club, as set forth in the by-laws, include promotion of a social organization, to co-operate in securing rational legislation and the formation of proper rules and regulations governing the use of motor vehicles in city and country, and to protect the interest of owners and users of motor vehicles against unjust or unreasonable legislation.

The general management of the club will be in a board of seven governors, active members exclusive of the president, vice-president and treasurer, who shall be members ex-officio. There will be three classes of members—honorary, active and associate. The active membership is limited to 500. The entrance fee and yearly dues for active members are each \$10. Fee and dues for associate members are each \$5. Persons applying before July 1 next, and elected, shall be exempt from the payment of the entrance fee, and will be considered "founder members." The by-laws also fully set forth the powers and duties of the officers and board of governors.

The temporary officers elected at the last meeting are: Chairman, R. C. Jenkinson; vice-president, Dr. H. C. Harris; secretary, E. E. Sargent; treasurer, C. R. Hoag. The meeting adjourned subject to the call of the chair.

The new organization owes its existence largely to dissatisfaction with the lack of life and snap in the New Jersey Automobile Club. At the April 30 meeting an effort was made by the guiding spirits of the latter to bring about an amalgamation of the divergent interests, even going to the extent of offering to turn the old club over to the dissatisfied ones. The offer was declined, however, and the formation of a new club proceeded with.

**Mill-a-minute racing cars are not far off.**



# The Metropolitan Salesrooms and Garages—XIII

If a New York garage was not erected especially for the purpose, it is a pretty safe guess that it was originally either a stable or a church—more likely the former. The home of the Packard car in this city is to be placed in the former category; and up to within a few weeks it was as uninviting, as dark, dismal and even dirty, as any one of the similar structures to be found scattered over the city.

A complete transformation has taken place, however. Iconoclastic hands have

begun more than a month ago, and has just been completed.

Starting at the left hand side, the front of the building is devoted to the office, the reception room and the passageway into the garage, which takes up nearly all the remainder of the ground floor.

The office has been enlarged to almost double its former size, and is rectangular in shape, the narrow portion fronting on the street. It opens into the reception and sales room, entrance to which is also had from

wood, raised more than a foot from the floor. An underground gasoline tank will be sunk in the pavement, just at the entrance, embedded in concrete, and with the stand-pipe inside the building.

At the rear of the building is the repair shop, running the entire width of the building, and being lighted by a number of windows. The equipment is exceptionally complete, consisting of two large engine lathes, a shaper, drill presses, a smith forge, a bench with vises, etc. The most difficult repairing can be done, and outside work is invited.

The second story front is given over to a large stock and parts room, while additional room for similar articles is provided by an extension between the office and the repair department. Here, too, are located the lockers for the use of patrons.

Power and light are supplied by a dynamo, run by electric current supplied by the lighting company. This replaces a gas engine formerly used for these purposes.

Some fifty cars are accommodated, and a dozen men employed.



been laid on the dark and dismal places, and the dirty walls and floors have yielded to the beneficent influence of whitewash and paint. The exterior has been furnished up and attractively lettered, and the interior remodelled, renovated and beautified. To-day the establishment is a fit place for well dressed people to enter and transact business.

The garage in question, which is the Eastern branch of the Packard Motor Car Co., in charge of Pardee & Co., is located at No. 317 West Fifty-ninth street, only about one hundred feet from Central Park. It has been in use for nearly two years, having been removed from lower Fifth avenue. The building has a frontage of 50 feet and a depth of 100, and is two stories in height, built of brick and solidly constructed. The work of remodelling was

the street, a spacious and handsomely appointed apartment, measuring some 50x35 feet, with a lofty ceiling. The walls are panelled to the ceiling, the lower part being finished in black and the upper part in a rich red, with the ceiling in cream, the effect being striking in the extreme. The walls are decorated with tastefully framed pictures, most of them representing automobiles and automobile scenes. The room is well lighted by a large window opening on the street, while at night two arc lights suspended from the ceiling give an artificial illumination. Three Model F Packard cars are displayed, being so arranged that it is easy to inspect them from all sides.

Two large doors lead from the street to the garage, where a number of new and used cars are stored. Two washing stands are provided, one of cement, the other of

## Business Wagons for Edison Companies.

Both in this city and in Boston, the local Edison companies have placed orders for a large number of electric vehicles to be used in their business. The greater part of them will be supplied by the Electric Vehicle Company, and the first of the heavy trucks intended for New York is almost ready for delivery. Several service wagons for use of the superintendents and their assistants are included in the orders.

The trucks will be fitted with special devices which will enable them to hoist poles, draw cables through conduits, or perhaps to string wire, in part from the electric storage batteries which will drive them to and from the points where they are needed. The five-ton open truck will have an electric winch under the driver's seat, while the three-ton truck will have a canopy top, and electric winch and pulley for hauling cables. Both trucks will be used for hauling apparatus and supplies to places where repairs have to be made, so that it will not be long before the gang of men who may now be seen occasionally running the big lead cables into one manhole and out of another will have their automobile truck at hand all the time to do the heavy work for them. The companies will, a little later, put in service a light van for emergency repairs capable of running at the rate of sixteen miles per hour in response to calls, and two trimmers' wagons to be used by the men who go about the city caring for the arc lamps.



## ENGINE EFFICIENCY

is now the Engrossing Subject With French Makers—A Difficult Problem.

Paris, May 22.—Of the many problems affecting the future of the automobile there is none more interesting or more important than the efficiency of the internal combustion engine. When makers saw that there was an enormous waste in the application of power to the driving of the vehicle they naturally set to work to reduce this loss in every possible way. They experimented with gears of all kinds with a view of selecting systems which would allow of the highest proportion of power developed by the engine being utilized on the driving wheels. They have thus settled down to standard methods of transmission, generally in the form of fixed and sliding change speed gears, with chain drive on the big cars and arbor shafts on the lighter carriages; but even with their long experience makers are unable to decide whether one system has any real superiority over another. They have, at any rate, enormously increased the efficiency of running gears, and so far as the present systems are concerned have now reached a point where further progress is largely a question of improvements in detail. Whether it is possible to secure still greater economy in transmission with high speed motors is a problem for the future.

Having done as much as they could in this direction, makers sought to economize power by reducing the dead weight of the vehicle, and thus we have seen a striving after lightness which has had such remarkable results in automobile construction. The progress recently made in structural methods is invaluable. By dint of skill and extreme care we have very light and strong vehicles, but it is evident that these results have not been obtained without adding to the cost of building cars, though this cost has been brought down in a large measure by the employment of big and economical plants.

Much has certainly been done in the way of economizing power by improvements in transmissions and a reduction of dead weight. But so long as makers were working along these lines they gave singularly little attention to the motor itself, and yet it is here that makers have the greatest opportunity of increasing the efficiency and economy of their vehicles. What has already been done is nothing compared with what automobile engineers may be capable of doing in the early future in utilizing the calories of the burnt gases to much better advantage than at present, for it is clear that if these calories are properly utilized the necessity of carrying out economies in other ways may not be so great, and, indeed, the perfection of the motor in this direction may very likely solve the problem of transmission, which evidently depends upon an elasticity of en-

gine power. The gearing down of motors must always be a wasteful process, and the greatest hope of the automobile lies in reducing this ratio as much as possible.

The importance of this question has become so impressed upon automobile engineers that they are now giving more attention to the engine than to any other part of the vehicle. It is obviously quite inadmissible that engineers should be content with motors utilizing from 20 to 30 per cent of the calories in actual work, and that all the rest should be not only lost, but should be the cause of serious inconvenience through the noise of the exhaust and the necessity of keeping the cylinders cool. The problem is easy enough of solution in stationary engines, but in the case of automobile motors the difficulties appeared at one time to be almost insuperable. These difficulties arise solely from the fact that the weight of the engine must be reduced as much as possible for the power developed. Consequently, full cylinder charges are necessary with high compressions, and the gases expand and leave the cylinder at a temperature representing a proportion of something like 20 per cent of the calories.

If these calories are to be saved the exhaust must leave the cylinder at not much above atmospheric pressure and at a low temperature, but with the small high speed engines developing relatively high powers this is, unfortunately, practically impossible. If the desired result is to be obtained a much smaller charge must be employed with a higher compression, so as to get a perfect combustion and a greater expansion in the cylinder. This means larger cylinders for given powers, so that in automobile practice the solution is not altogether satisfactory. For low speeds the result is practically obtained by governing on the exhaust, when some of the burnt charge is left in the cylinder, and serves to compress the smaller quantity of fresh gas, but any advantage from this source is partly or wholly lost by the resistance offered by the burnt gas when the exhaust valve is closed, and also by the additional heating of the cylinder walls through the retention of these hot gases.

It was hoped that the inconveniences of governing on the exhaust would be overcome by throttling the admission of gas, and to a large extent experience has shown that this method has an advantage, especially in the way of keeping the valves cooler, but, on the other hand, the throttling caused a good deal of irregularity in the mixture. This has been overcome by the new carburetors of the "compensating" type, and with the introduction of these the system of throttling on the induction has become general. Some of the makers are now of the opinion that with the employment of the mechanically operated inlet valve the usual throttling valve may be dispensed with altogether and replaced by a variable lift to the induction valve. This has the advantage of allowing the valve to be shut at any point of the piston stroke. In most cases it is the lift of the

valve which is varied, so that it offers the same inconveniences with the ordinary type of carburetor as the throttling valve, and the best method is obviously to keep the valve full open during a part of the stroke, when a partial charge can be drawn in under normal conditions without affecting the working of the carburetor.

The admission of smaller charges does not, unfortunately, solve the question of engine efficiency unless the compression remains the same, and thus we come round in a sort of "vicious circle," since it is evident that small charges without high compression means a diminution of engine efficiency, though they have the advantage of economy and convenience under certain conditions of running. In order to understand how this decrease of efficiency is brought about we must see how the gas is exploded. The gas is composed of particles surrounded by air offering a certain resistance to the passage of heat between them. If the mixture is not under compression the firing of the particles in contact with the spark cannot propagate with sufficient rapidity to the mass. The combustion is all the more rapid as the particles are brought closer together, and thus the higher the compression the quicker and more complete is the combustion. Again every automobilist knows the importance of a "fat" spark, and this is due to the fact that a larger number of particles are fired in contact and the ignition thus spreads with much greater rapidity through the mixture. It will thus be seen that with the throttling of the engine the gas cannot be burnt so rapidly as when under normal compression, though the loss in efficiency is probably not so great as would seem to be the case in view of the fact that the engine is running more slowly and may allow of a fairly complete combustion.

The problem is extremely complicated, and while high compressions and hot ignitions may do something toward meeting the difficulty it cannot provide a complete solution, and until a better means be found some makers are seriously considering the old question of compounding motors, but here again the increased weight and complication seem to offer the same objections as are raised against the use of small charges with high compressions. The matter is receiving so much attention at the moment that it may at least be hoped that an incessant study of the internal combustion engine will suggest means of augmenting an efficiency which, though it may be considered enough for want of anything better, is yet capable of considerable improvement.

### Incorporated at St. Paul.

Incorporation papers have been issued to the Automobile Club of St. Paul, St. Paul, Minn. The election of officers resulted as follows: President, R. C. Wright; first vice-president, Paul H. Gotzian; secretary, A. W. Farrar; treasurer, Gustave Scholle; directors, W. B. Joyce, James S. Bryant, Samuel J. Joy and H. J. O'Brien.

## DELAWARE'S SANE LAW

**Has no Licensing, Numbering or Similar Obnoxious Features to mar it.**

A model of conciseness and simplicity is the automobile measure passed by the Delaware Legislature at its recent session. Its main section consists of a signal and a stop-on-signal provision, both of which are almost beyond improvement; while a moderate penalty and a distinct declaration that the act does not relieve motorists from civil suits, make up its other two sections. Evidently the lawmakers of the Diamond State believe that the automobile is a road vehicle, subject, with very slight modifications, to the laws of the road and amenable to acts already on the statute books.

The law is as follows:

Section 1. That after the approval of this act any person using an automobile upon any of the public highways of this State shall slow down the speed of said automobile upon approaching any wagon, carriage, buggy or other vehicle to which there is a horse, mule or other animal used for drawing wagons, carriages, buggies or other vehicles, harnessed or attached, and if the horse, mule or other animal attached to said wagon, carriage, buggy or other vehicle becomes badly frightened by the approach of said automobile, so that there is danger of injury to the occupant or occupants of said approaching wagon, carriage, buggy or other vehicle, then the owner or driver of the said automobile shall bring it to a full stop and so remain until those occupying the said wagon, carriage, buggy or other vehicle shall have passed safely by. The owner or driver of any automobile using any of the highways of this State shall not use the said highways without first providing himself or herself with a horn, bell or some other instrument by which he can warn other persons using said highways of his approach, and the owner or driver of said automobile shall give due warning when approaching other vehicles where the highways, by reason of curves, obscures the said automobile from the view of his approach.

Section 2. That any person or persons violating the provisions of this act shall be liable to a fine of not exceeding \$10 for each offence, to be recovered before any justice of the peace of the county in which said offence is committed.

Section 3. That nothing in this act shall be construed to curtail or abridge the right of any person or persons injured in person or property to entertain a civil action for damages by reason of injuries received for or on account of the use of said automobiles on the public highways of this State and for which they are entitled to damages by a civil action.

## Where the Electricity Came From.

Steam cars are so far removed from connection with anything electrical that the following phenomenon is very curious:

A steamer had been standing by the roadside for a few minutes, when the driver started his air pump. A man who was standing in the road beside the vehicle, a moment later touched the metal bar supporting the canopy and received a sharp electric shock. Investigation followed, but no cause could be found. It was noticed, however, that whenever the pump was in operation, and not at other times, a person standing on the ground and touching the metal parts of the wagonette anywhere would receive a shock. An engineer, to whose attention the matter was brought, gave this explanation of the occurrence:

"I suppose the pump mechanism, running at a very high velocity, developed electricity by friction. If the carriage had touched the ground with its metal parts at any point this electricity would have escaped by the usual method before it could have been noticed; but you see the wagonette was raised from the ground by its rubber tires and the ground was very dry, so the vehicle was perfectly insulated. With the pump storing up electricity, and no chance for it to escape through the vehicle, when a man standing on the ground touched the metal trimmings he at once offered a way by which the electricity could reach the ground."

## Test of Inlet Valve Spring.

There is no definite formula of strength for inlet valve springs, but as a rule those used with automatically operated inlet valves should be of sufficient strength to carry the weight of the valve itself and about one ounce in addition, though this strength varies very much with the suctional power of the motor. Taking it as a general rule, however, the weight is as given, and the springs can very easily be tested by putting them in their seats and then placing weights upon the top until they are noticed to be just lifting the valve from the seat. If the spring requires more than two ounces weight it should be weakened by being slightly compressed.

## One Source of Exhaust Trouble.

Sometimes a motor may suddenly stop from the failure of the exhaust valve to seat properly. This may be due to the warping of the valve through the engine having run dry and become too hot, or it may be from the failure of the closing spring or the sticking of the valve stem in its guides. The valve should be removed, and the stem cleaned and scraped—or straightened if it requires it—until it moves freely in the guide and the closing spring given its full tension. If the valve still leaks so that the engine will not start or develop sufficient power, the valve will have to be ground into its seat.

Fuller's earth, which can be obtained from almost any druggist, is a good dressing for a slipping friction clutch.

## ELECTRICS' NEW FACILITIES

**Combination of Boston Lighting Companies Results in Boon to Motorists.**

By reason of the combination of electric lighting companies within a radius of twenty-five miles of Boston, the facilities for charging electric automobiles will before the present summer is ended undergo a vast extension. It will be possible for any automobilist to buy a charge of electricity not only at almost every large automobile garage in the Boston district, but at electric light stations and even in livery stables, and arrangements will be made whereby most of these places will be open for business every day in the year and at all hours of the twenty-four. It is even suggested that coupon books be provided, which may be purchased as railroad mileage books are purchased, and from which the coupons will be accepted in payment for electricity at any of the stations. There will be a few stables and lighting stations in the district which will not be open between midnight and six or seven o'clock in the morning, but the majority will be open all the time. In each station special apparatus is or will be installed adapted to the recharging of automobiles.

Power stations which are now included in the system where vehicles may be charged at all times are those in Brockton, Brookline, Cambridge, Gloucester, Lawrence, Lynn, Lowell, Malden, Medfield, Salem, Stoughton and Weymouth. Stations other than power stations where vehicles may be charged are located at Arlington, Brockton, Fitchburg, Lawrence, Lowell, Lynn, most of them open for limited periods in each day; and three in Boston, open all the time.

In addition, the new combine about the middle of June will open charging stations in livery stables in Milton, Dedham, South Framingham, Natick, Winchester and Grove Hall, and in lighting stations in East Boston, Somerville, Woburn and Watertown. By the first of August this list will be augmented by recharging stations in Arlington, Canton, Creelsea, Chestnut Hill, Forest Hills, Needham, Newtonville and Stoneham.

This will mean about forty recharging stations throughout the eastern Massachusetts district, each within a fair running distance from some other. There will be no charge less than thirty cents, but for electricity in quantity the rate will be ten cents per kilowatt.

## One Cause of Short Circuits.

The entire wiring of a car should be carefully examined from time to time for signs of wear in the insulation. At certain places the wires are exposed to continual, if slight, friction, which will ultimately break through the insulation and establish a short circuit. The timely application of a little insulating tape will often save much trouble in this respect.

## CONTRASTS IN LEGISLATION

### Laws of Three States Compared—N. A. A. M. Points way to Reforms.

Remarking upon "a refreshing contrast to the vindictive and absurd law recently enacted in New York," the contrast being contained in the "sane and reasonable" laws just passed in Connecticut and Delaware, given elsewhere in this issue, the National Association of Automobile Manufacturers, through Secretary Unwin, have sent out to its members, to automobile clubs and to users of automobiles a circular letter on the subject of automobile legislation.

"We are well aware that just complaints have been made by individuals and localities against the improper and unlawful use to which owners of automobiles have put their carriages," the letter says. "We have no sympathy with careless, reckless or inconsiderate driving. We are as anxious as any one to have the wholesome, and indeed severe provisions of the highway law and penal code firmly enforced. But because some individuals have violated, and do violate, the law relating to the use of their machines upon the public highways, we find no justice in the attempt made in some States to so amend the existing statutes that an automobilist is liable to be stamped as a criminal for any slight and unintentional disregard of the law.

"We believe that well directed efforts by automobile clubs, manufacturers and the ever increasing number of owners, will be productive of uniform and fair regulations which will provide for severe punishment to the few who are unmindful of the comfort and safety of others, but which will not take away from law-abiding automobilists their right to the free use of the highways.

"We invite your co-operation in the work for:

"First—Reasonable and uniform laws.

"Second—No discrimination against the automobile in favor of the horse, mule, or other domestic animals."

"Third—Adequate penalties for the suppression of that enemy to the automobile industry and sport, namely, the reckless driver."

### Single or Double Cylinder Walls.

In examining sectional drawings of twin cylinder gasoline engines it is found that some designers allow only a single wall between the cylinders, while others provide a wall for each cylinder, with a water space between the two walls. No doubt every designer of twin cylinders thoroughly considers the question of the possible effect of alternate heating and cooling of opposite sides on a single wall. If there is no danger of distorting a single wall owing to the great difference in temperature on its opposite sides at any given moment, and no danger of over-

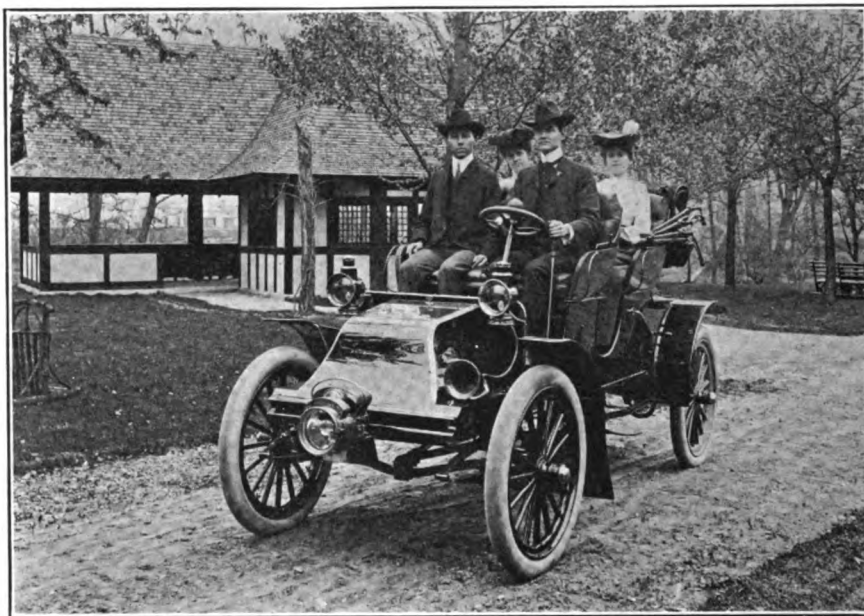
heating the wall, which is subjected to the temperature of explosions with its two sides alternately, and thus impairing lubrication, the single wall certainly has the advantage over the double wall. Weight is saved both in the cylinder casting and in the crank case casting, and in a two-cylinder engine with double-throw crank the closer the cylinders are brought together the better is the balance of the reciprocating parts. At present the majority of motors seem to be built with a water space between the cylinders, although the other design is not uncommon. A discussion of the merits of these alternate forms of construction by engineers who have had experience with either or both should prove timely and interesting.

## PITTSFIELD CLUB'S CONTEST

### Conducts a Successful Hill Climb on Decoration Day—Results in Detail.

That enterprising organization, the Berkshire Automobile Club of Pittsfield, Mass., carried through a successful hill climbing contest on Decoration Day. Ten cars participated, five gasoline and five steam, and a number of close and exciting finishes occurred, and were keenly enjoyed by the large number of spectators who had assembled.

The course selected was on West street,



DRIVING A HAYNES-APPERSON IN THE KOKOMO PARK.

### Muffler With Unusual Features

A muffler of somewhat unusual construction that has been brought out has the usual cylindrical chamber, within which are placed a series of combination cones and baffle plates. The gases when entering rush against an annularly-flanged baffle plate and then pass out around the flange and through holes near the periphery of the base of the cone. Their exit from the pierced apex of the cone throws them against the central baffle plate of the next cone. The muffler is said to be more than ordinarily effective in reducing the noise of the exhaust.

### For Charging Accumulators.

A new electrolyte used in accumulators consists of a semi-solid substance composed of sulphate of lead mixed in diluted sulphuric acid of 1,200 deg. sp. gr. It is claimed that with this mixture the cell recovers itself to an extraordinary degree, and maintains a voltage for considerably longer periods than the ordinary accumulator.

on Briggs and Dunham's hills, the distance marked out being 2,100 feet, or just 12 feet less than two-fifths of a mile. In the gasoline class both first and second place fell to Wintons, a Stevens-Duryea being third. In the steam class only three-fifths of a second separated the winners of first and second place, both being Grout cars, while a Toledo came in a good third.

The summary is as follows:

#### GASOLINE CARS.

Position.	Owner.	Car.	Min.	Sec.
1	Charles K. Crane (Winton).....		1	2
2	Franklin Weston (Winton).....		1	10 2-5
3	Phillip Weston (Stevens-Duryea)		1	34 1-5
4	Samuel G. Colt (Oldsmobile)....		1	59
5	Dr. F. W. Brandow (Winton)...		2	26 3-5

#### STEAM CARS.

Position.	Owner.	Car.	Min.	Sec.
1	E. H. Kennedy (Grout).....		1	17 3-5
2	Dr. O. S. Roberts (Grout).....		1	18 1-5
3	George E. Hall (Toledo).....		1	28 1/2
4	Dr. E. S. Robinson (Grout).....		1	47 1/2
5	James Lawton (White).....		2	21 1/2

## GOVERNOR SIGNS THEM

### And Connecticut's Automobile Bills Become Laws—Their Provisions in Full.

Having received the Governor's signature, the Connecticut measure relating to the registration of automobiles and their rate of speed have become laws, and, in accordance with the provisions of the first section, becomes operative on July 1. The bill relating to registration is supplementary to the existing law relating to the speed of automobiles, which has long been regarded as the best law relating to automobiles on the statute books of any State.

Under the spur of the existing craze to legislate for automobiles whether or not they needed it, this excellent measure has been slightly modified. The present speeds of 12 and 15 miles an hour have been retained, but a stop-on-signal clause and an imprisonment penalty for violation of the law have been added. In its amended form the law is as follows:

Section 2,089 of the general statutes is hereby amended to read as follows: No motor vehicle shall be run on any highway or public place at a rate of speed dangerous to life and property, or on any highway or public place outside the limits of a city or borough at a rate of speed to exceed 15 miles an hour, or on any highway or public place within the limits of any city or borough at a rate of speed to exceed twelve miles an hour. Upon approaching a crossing of intersecting streets or roads, the person having charge of the power of such vehicle shall have such vehicle under control, and shall reduce the speed of such vehicle until said crossing of such street or road shall have been passed. Upon meeting or passing any vehicle drawn by a horse, the person having charge of the power of such motor vehicle shall reduce its speed, and if the horse drawing said vehicle appears to be frightened, the person in charge of said motor vehicle shall cause said motor vehicle to come to a stop. Wherever the term "motor vehicle" is used in this section, it shall include all vehicles propelled by any power other than muscular, excepting the cars of electric and steam railways and other motor vehicles running only upon rails or tracks. No city, town, or borough shall have any power to make any ordinance, by-law or resolution respecting the speed of motor vehicles, and no ordinance, by-law or resolution heretofore or hereafter made by any city, town or borough in respect to motor vehicles shall have any force or effect; provided, however, that powers heretofore given to any city or borough to regulate shows, processions, assemblages, or parades in streets or public places, and to regulate the use of public parks, and all ordinances, by-laws and regu-

lations which may have been or which may be enacted in pursuance of said powers, shall remain in full force and effect. The Mayor of any city, the selectmen of any town, or the warden of any borough, may, upon any special occasion, or whenever in their judgment it may be deemed advisable, grant permits to any person or persons or to the public to run such motor vehicles during a specified time or until such permit is revoked, upon specified portions of the public ways or highways of such city, town or borough at any rate of speed, and may annex such other reasonable conditions to such permits as they may deem proper. Any person violating any of the provisions of this section shall be fined not more than \$200, or imprisoned not more than 30 days, or both.

The registration law, which is entirely new, provides as follows:

Section 1. No automobile or motor vehicle shall be used or operated upon the public highways of this State, after July 1, 1903, unless the owner thereof has complied with the requirements of sections two, four and five of this act.

Section 2. The owner of every automobile or motor vehicle shall file in the office of the Secretary of the State a statement of his name and address, together with a brief description of every such vehicle owned by him, on a blank furnished by the said Secretary for the purpose, and shall obtain from said Secretary a numbered certificate for each of such vehicles, which certificate shall state the name of the owner of such vehicle and that he has registered in accordance with the provisions of this act.

Section 3. The Secretary of the State shall keep a record of all such statements and of all certificates issued by him, which record shall be open to the inspection of any interested party at all reasonable times.

Section 4. Every such automobile or motor vehicle shall have the initial letter of this State and the number of the certificate issued for such vehicle displayed upon the back thereof in a conspicuous place and manner, the letter and figures of such name and number respectively to be at least three inches high.

Section 5. A fee of \$1 shall be paid to the Secretary of the State for each certificate issued by him in accordance with the provisions of section two of this act.

Section 6. No license, permit or registration shall be required of the owner or operator of any automobile or motor vehicle as a condition of operating such vehicle, except in accordance with the provisions of this act, nor shall any such vehicle be required to be marked in any way except in accordance with the provisions of this act. But nothing in this section contained shall apply to such automobiles or motor vehicles as are offered to the general public for hire.

Section 7. The provisions of sections one, two, four and five of this act shall not apply to such automobiles or motor vehicles as are owned by manufacturers of or dealers in such vehicles and are not employed in the

private business or for the private use of such manufacturers or dealers.

Section 8. The provisions of this act shall not apply to automobiles or motor vehicles or to the owners thereof, provided, that such owners shall have complied with the law of any other State or Territory of the United States, which shall have in effect a law similar in all respects to sections one, two, three, four, six, seven and eight of this act, except that in such event such owners shall display the initial letter of such State or Territory in place of the initial letter of this State.

Section 9. The penalty for violating any of the provisions of this act shall not be less than \$5 nor more than \$25.

### Gives Fifteen Inches of Air With Each Stroke.

A steam power-driven tire inflator has made its appearance. It is about 8 inches long, 6½ wide and 8¼ high, weighs about 15½ pounds and is double-acting. There are two cylinders, each 2 by 1 inch, and consequently two discharges of air at each revolution of the disk or sprocket which drives it. There are but two check valves, and the air from both cylinders is discharged through one outlet. It has a capacity of about fifteen cubic inches of free air per stroke. This inflator, which is named the Reoson, is operated by steam, and not only saves time, but energy, besides giving a more complete inflation than a hand pump.

### Cooling System Should Undergo a Cleaning.

After a car has been in continual use for some time, it is not a bad plan, if one has nothing particular to do, to thoroughly overhaul the cooling system, wash out the water tank and the jackets, and thoroughly cleanse the pipes and coils by means of a hose. It is wonderful what a lot of dirt accumulates after a spell of continual use.

### Resin Will Make the Thread Hold.

Sometimes a nut departs from the straight course of its duty and, scorning the gentle persuasion of the wrench, refuses to stay in its proper position. Should one of those on your vehicle act in this annoying manner, it can usually be brought to reason by melting a little resin on the thread.

### Races at Lexington's Fair Grounds.

Several automobile races will be run at the Fair Grounds, Lexington, Ky., on July 4, in connection with the annual celebration of that day. C. G. Fisher, of Indianapolis, and J. Graham, of Chicago, have been engaged to run a special match race.

### Providence has Many New Automobiles.

It is estimated that already there has been an increase of 75 per cent in the number of automobiles owned in Providence, R. I., while there are many unfilled orders. Deliveries are being made at the rate of 20 or 25 cars per week.

### Wonders of his Steam Car.

He had "just broken into" the automobile game, and he was making up for his ignorance of the technical side of the business by cutting loose from sober fact and soaring into the realm of space in the effort to extol the merits of his car.

"In the first place, our condenser is away beyond any other in the market," he began. "The first one was tried by one of our best operators, and while he was out a heavy fog came up, and he started to run back to the shop, when he noticed his water tank was brim full and running over. An investigation showed the condenser had been condensing the fog and sending it into the tank.

"Then, we have a strainer on the feed water valve that not only collects all dirt, but it puts it into shape so it can be disposed of. We sold a rig to a lumber dealer up in Maine, and what do you think? There was so much sawdust in the water that the second time he blew off his boiler, out came most of a bundle of laths; the valve had compressed the sawdust in the water into that shape. Then our boiler is arranged with a valve between the engine and boiler that increases the pressure to any desired amount, without any extra pressure, on the boiler. This is a new discovery and is only applied to our higher priced carriages. Our new boiler is also equipped with a dividing line, so that if you should happen to burn out a boiler on one side of the line, you still have the other side to come home on. This is a very valuable idea."

He went on in this flamboyant style at considerable length, and he talked so earnestly that some doubt was caused in the minds of his auditors as to whether he really did not believe part of what he said.

### Transport Vehicle Test in Germany.

A German transport motor car competition was scheduled to be held on May 25, under the auspices of the German Agricultural Society, and nearly all the cars were to use alcohol as fuel. Not only motor trolleys, but also traction engines and trailers, will be permitted to compete; and cars for the transport of agricultural materials and milk will receive special attention. Speed trials will not be held. Efficiency only is to be considered, and all the vehicles will have to travel about 300 miles each over good, medium, and bad roads. The Kaiser takes the greatest interest in the competition, and has offered a very valuable piece of art as a special prize.

### Found That it Would Run.

In response to the complaint of a purchaser that his new car would not run, a man from a certain factory was sent to see what was the matter. He sent the car along at such a pace that he was arrested for exceeding the legal rate of speed, and fined. Now the maker wants to know if the owner of the car should not pay the fine.

### Dollita's Tiny Electric Automobile.

What is unquestionably the smallest automobile ever built is one used by a tiny vaudeville performer, whose stage name is Dollita. The vehicle was built in Washington, D. C., and in spite of its lilliputian proportions is capable of running 15 miles at a rate of 10 miles an hour, on one battery charge.

The vehicle is a victoria with a top, and is upholstered in solid leather. The body is painted a dark green, with running gear of bright red, with nickel plated wheels and pneumatic tires two inches in diameter. In fact it is an exact miniature of a full grown victoria, with everything complete down to the tiny gong and card case. With the top up, it does not come up to the ordinary man's elbow.

The automobile is operated by electricity and with the batteries charged and in position it weighs only 225 pounds, and can run for 15 miles at an average speed of 10 miles per hour. It is not much larger than an ordinary baby carriage. The seat is eighteen inches long, and the forward wheels with pneumatic tires are eight inches, while the rear wheels are twelve inches in diameter.

### French Engine With Novel Features.

A new two-cylindrical engine, the design of which has been protected by the well-known French firm of De Dion-Bouton, has the two cylinders set sufficiently far apart upon the base chamber to allow of another and smaller cylinder being placed between them. This cylinder contains a massive double-trunked piston, which is connected by an ordinary connecting rod to a central crank on the engine shaft. This central crank is set at an angle of 180 degrees with the two outer cranks. The weight of this central or balancing piston and its connecting rod is just double that of the engine pistons and connecting rods proper. The movements of the central piston and rod are exactly opposite to the others, and it is claimed that the reaction of inertia due to the rapid rectilinear movement of the pistons is annulled, and that the guide pressure due to the angles of the connecting rods is also counterbalanced to a large degree. The crank shaft is, of course, balanced or counter-weighted in the usual way.

### Preparing for the Inevitable.

Beginners should make a study of the anatomy of their vehicles, or they never will become intelligent or satisfied motorists. The comfort of knowing how to repair any of the minor causes of stoppage can only be estimated when they come to grief miles away from any one capable of doing the repairs or adjustments for them.

### Squeaks are Forerunners of Trouble.

One should always be on the lookout for "squeaks," for any such unusual noise is evidence of lack of lubrication and generally foretells a breakdown unless heeded at once.

### Numbering Worries Quaker City Motorists.

Philadelphia motorists are in danger of becoming bewildered over the numbering ordinances to which they are supposed to be subject. Matters are reaching a pass where neither they nor the legal luminaries whom they consult know where they are "at."

For several years the Quakers have been obliged to procure licenses and numbers to use while driving in Fairmount Park. Next the municipal authorities enacted a law requiring a license and number for every motorist using the city streets. This made two numbers that had to be carried, for of course everybody drives in Fairmount Park. The third blow came a few weeks ago, when the State Legislature passed the Grim bill. This, too, contained the usual numbering clause, and now the Philadelphia officials are trying to figure out whether it is necessary to procure a third number under the provisions of the Grim law.

City Treasurer Moore has answered inquiries by saying that he has consulted the City Solicitor and has been advised that it was unnecessary for him to exercise any authority in the matter of licenses, because councils had already provided for the licensing of automobiles, and licenses issued through the Department of Public Safety.

The inquirers have all been concerned over the probability of arrest beyond the borders of Philadelphia county, where they carried the license only of the Department of Public Safety. If the Solicitor's opinion is sustained the Philadelphia number will be sufficient; but some concern is felt whether the country authorities will recognize the city license.

### Who was the Owner?

It was a very conscientious motorist who having had the misfortune to run over a fine fox terrier, at once pulled up, and went back, expressed his regret at the occurrence to the apparent owner, and gave him a five-dollar bill. Then he drove off, while the man observed: "That's what I call a real gentleman. Now, I wonder whose dog that was!"

### Nine Miles is Missouri's Limit.

On June 8 the new Missouri automobile law takes effect. It provides for the taking out of licenses in all counties passed, and the printing of the different license numbers on the lamps in three-inch figures. The speed limit is nine miles an hour.

### Reorganized Rochester Club Elects.

Officers of the reorganized Rochester Automobile Club have been elected as follows: President, Lee Richmond; vice-president, Dr. C. A. Huber; secretary, F. E. Mason, and treasurer, Fred Graves.

### To Guard Against Back Firing.

Novices in motor matters should be very careful to see that the ignition lever of their cars is retarded before they attempt to start the engine. Otherwise the nasty blow of a "back fire" may be experienced.



## WASHINGTONIANS DECLARE WAR

### Protest Against New Rules and Organize to Test Their Constitutionality.

Washington, D. C., motorists are divided over the extent to which opposition to the new automobile regulations is to be carried. Some favor waiting to see how they work in practice, while others are outspoken and even bitter in denunciation of the rules.

The latter held a meeting last week at the residence of Dr. W. B. French and formed the National Capital Automobillists' Association, officers of which are to be elected at a second meeting which will be held shortly. Dr. French and Secretary E. M. Sunderland spoke against the regulations, and it was decided to appeal to the courts to declare them unconstitutional. In pursuance of this resolve the following resolution was adopted:

"Resolved, that it is the sense of this meeting that all and every just and impartial police regulation governing the movements of all vehicles upon the streets should be observed and their enforcement encouraged, to the end that the streets shall be as safe as possible to the life and limb of our fellow citizens.

"That it shall be the purpose of each and all to accord to every other co-user of the highways his full share of consideration and privilege, and lawful right to which he or they may lawfully claim as due, by the law of custom or usage of the road.

"That we consider as unjust and partial the proposed police regulations of the District of Columbia; that such regulations are not such as were contemplated by Congress that the Commissioners may make; that their authority under the tenth specification of the act of January 20, 1887, and amendments thereto, to regulate the movements of vehicles on the streets, cannot be construed to mean to regulate the constriction or equipment of vehicles, which is clearly manifest from the context of their recent proposed enactment.

"That we will oppose and resist in the courts the enforcement of any and all police regulations governing the construction of automobiles as unwarranted, or the movements of the same as a distinct class."

Among those present were the following: William B. French, A. M. Keen, Albert B. Dulin, Hugh Wallis, Chris J. Gockeler, P. J. Lockwood, C. E. Doyle, S. S. Olds, Jr., W. J. Foss, W. M. Sprigg, DeWitt C. Chadwick, Edgar P. Copeland, J. W. Boyd, F. De B. Weston, E. M. Hasbrouck, Horace A. Dodge, E. M. Sunderland, W. E. Spire, L. A. Hill and J. C. Suter.

In addition to the complaint contained in the resolution—which refers to the clauses relating to the construction of brakes, locking devices, etc.—objections are made to the numbering and licensing sections of the regulations.

### Inspecting Highways in an Automobile.

Following up their successful experiment of a year ago, the Massachusetts State Highway Commissioners are using a big steam wagonette for inspection purposes. In a sample day's run recently, 73 miles were covered, in addition to a side trip of 15 miles, the route being through Roslindale, Westwood, Dedham, Norwood, Walpole and Norfolk to Wrentham, about twenty-five miles; then to Franklin, five miles; to Medway, five miles; to Holliston, five miles, and South Framingham, six miles; later returning to Boston through Natick, Wellesley, Newton and Brookline, twenty-two miles.

Boston was reached on the return journey early in the evening, the trip having been made in much faster time than could have been accomplished even with many relays of horses. No trouble of any kind was met with, and the commissioners are loud in their praises of the behavior of the vehicle, which carried six people.

### Lump Sugar for Fractious Horses.

Before becoming a motorist F. E. Stanley, the Newton, Mass., manufacturer, was a keen horseman. Consequently, he acquired a knowledge of the noble beast that stands him in good stead now. Not long ago he encountered the driver of a nervous horse that plainly showed its distaste for the automobile. Seeing this he slowed up and stopped. "Have you a lump or two of sugar?" he said. Several were given him and he fed them to the anxious horse while sitting on his machine. "Now let him back away and come on again," he said; and it was done and more sugar given and, as he expressed it, "He is now more anxious for my sugar than anxious about my machine." And so he was for he was then driven past without any trouble.

### Broken Contact Blade Caused the Trouble.

If one's engine is heard to knock very violently, so much so that the first impression given is that either the crankshaft has broken or the big end bearing bolts have got adrift, it is well, before jumping at such a conclusion, to examine carefully the ignition. In a case in point, which occurred at the end of a short tour in which the engine started knocking so badly that the owner of the car feared to run it any further and left his carriage some thirty miles from town, wiring the makers that something had gone seriously wrong with the engine. It was ultimately discovered that the contact blade of the commutator was fractured, and that the knock was due entirely to irregular firing caused thereby.

### Officers for Ohio Capital's Club.

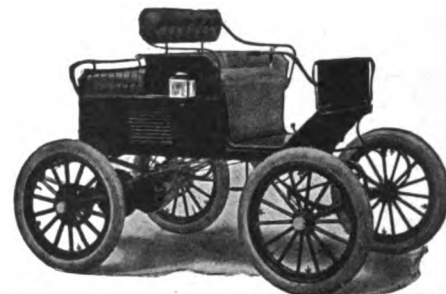
The Columbus (O.), Automobile Club held its annual meeting last week and elected these officers: President, Dr. C. M. Taylor; vice president, Harry M. Gates; secretary-treasurer, Perry Okey.

# NATIONAL ELECTRICS



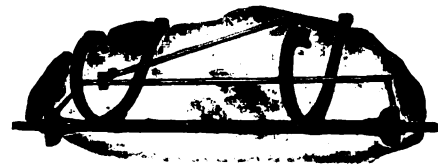
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## GENESIS OF THE SPARK GAP

### Another Explanation of its Cause and Effect— Only Temporarily Useful.

"It is somewhat surprising that no electrician since the external sparking gap became the fashion has come forward to explain the theory and practice of the electric spark as used to produce the explosion of gases in the cylinder of a motor car. I have fitted an exterior gap to my car, and find that there are really no circumstances connected with the working of the outside sparking gap which cannot be explained in the light of knowledge we already possess as to the working of high tension currents," says a writer in *The Car*.

"It is common knowledge that the high tension current is produced by the employment of a transformer, which alters the voltage of a low tension current generated by a primary, or given off by an accumulator into a current of great intensity, the action of which is something analogous to the process of drawing a thick rod of copper into a fine copper wire, the thick rod being the discharge from the primary batteries and the thin wire the high tension current produced by the transformer.

"Let us say, for example, that the voltage (which is really the only item which concerns us) of the primary circuits is four volts, and that of the induced circuit 30,000 volts. This current of 30,000 volts conducted to the ordinary sparking plug has sufficient intensity to jump a considerable air space or break at the platinum points. As a matter of fact, the gap of approximately 1-16 of an inch employed in the sparking plug is very much narrower than the normal high tension current is capable of jumping, and what takes place in adding a second gap is that we call upon the current to expend its energy in discharging across two gaps instead of one.

"Now, the reason why the employment of a second exterior gap produces the popular phenomenon of the spark taking place across a dirty plug, which would not work satisfactorily without the external gap is this, that, whereas the intensity of the current when applied to a single gap is sufficient to break down the defective insulation of the plug, which is coated with a carbon deposit, so that the current leaks across the sooty deposit, the employment of the exterior gap reduces the voltage of the current at the sparking plug proportionately to the length of the gap in the exterior plug. Technically, the two spark gaps are 'run in series,' just as one runs two electric lamps, each of fifty volts, in a circuit of one hundred volts; and, supposing the voltage of our high tension circuit is 30,000, with equal exterior and interior gaps, we get 15,000 volts at each gap; or, if one gap is twice as long as the other, 10,000 volts will be expended at one dis-

charge and 20,000 at the other, and so on in the same proportion.

"This explanation destroys the claim that the exterior gap is an intensifier of the current at the internal plug, and the advantage claimed is really on account of the reduction of the voltage at the plug instead of the intensification thereof, as it is less liable to leak at the reduced pressure until the deposit is greater. Theoretically, the reason is as follows: It is well known that dry air is a perfect insulator; the insulation resistance of damp air is proportionately less. The same applies to other gases. Taking the before-mentioned high tension voltage of 30,000 volts, we have that amount of force at our disposal to discharge across a certain resistance. Now, if we divide the space at our disposal into two equal halves, the intensity of the discharge will be absorbed equally at the two breaks in the continuity of the circuit, and the force expended in the present instance will be 15,000 volts at each gap, or in other proportion according as the external gap is longer or shorter than the internal one.

"As regards the leakage of current across the surface of a sparking plug, this is not caused by the presence of oil upon the plug, as oil is known and recognized to be a good insulator. It is the carbon or soot contained in the oil or deposited upon the plug which causes a leakage of the current, and there is nothing extraordinary in making a plug spark when immersed in oil, for the reason before mentioned; in fact, oil is commonly employed in insulators to prevent the deposit of damp or water upon the insulators, which reduces their insulation resistance.

"The use of the exterior gap will only be found efficacious so long as the carbon deposit upon the interior plug is small and the leakage so slight as not to stop the sparking on the platinum points; but so long as there is carbon upon the surface of the porcelain there will be a tendency for the current to leak across. The discharge at the platinum points may continue, however, until the conductivity of the carbon deposit enables the discharge to take place across the surface, and as soon as the porcelain is sufficiently conductive the spark will go on merrily in the exterior gap, and the passage across the internal plug will be made by way of the sooty deposit.

"In my opinion, the only utility of the exterior gap is the means it provides of seeing whether the high tension circuit is in working order without removing the plug from the cylinder, and it should be accomplished by means of a series shunt switch to enable the external gap to be switched in and out of circuit. The employment of the external gap, however, will never remove the necessity or desirability of keeping the insulated surface of the porcelain or other insulating materials of the sparking plug in proper condition, as the employment of the external gap is only an idle method of putting off the moment when the plug has to be taken out and cleaned; and unless one has a sufficient

surplus margin in the voltage of the secondary current, i. e., in the winding of the transformer, it will be found impossible to use the exterior gap, as the reduced voltage at the interior plug, when using the external gap, will be insufficient to jump across the two gaps. In fact, I have found that while my batteries are strong enough to maintain the full voltage in the primary circuit, I can use the double gap, but when the pressure of the batteries is below the normal working voltage it is necessary to close the external gap to maintain the spark in the interior of the cylinder."

### Antiquity of the Flash Boiler.

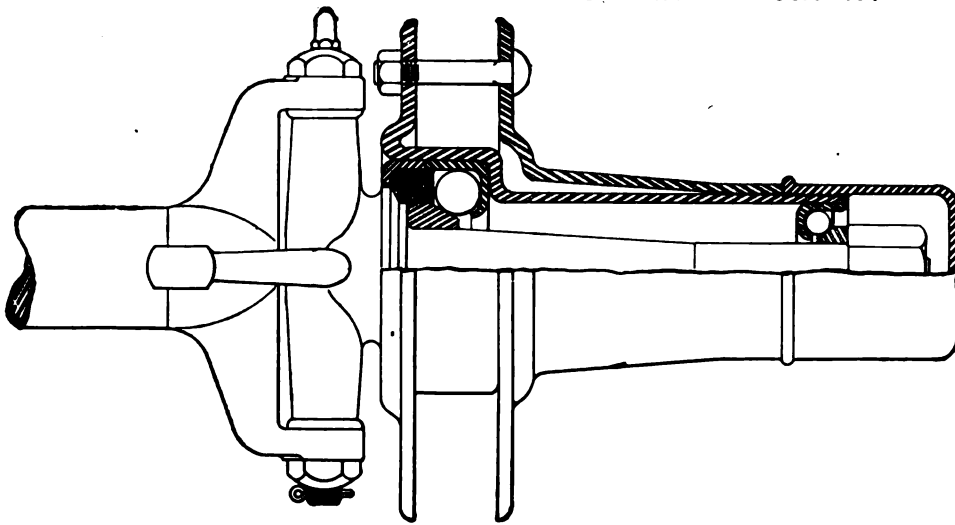
The true flash boiler, says "The Engineer," is a very old invention, consisting essentially of a large cast iron pot, the major portion of which was kept redhot, and into which water was injected through a rose or sprayer, and falling on the hot iron was instantaneously "flashed" into steam. The intention of the inventor was to send in just as much water at each stroke of the engine as would supply steam for the next stroke. In another form of flash boiler mercury was kept at a high temperature, and water was dropped on it to be flashed into steam. These and a dozen similar inventions all died a natural death. Objection has of late been raised against the use of the term "flash boilers" in connection with boilers of the small, long tube, or Serpollet type. These, it has been argued, are not flash boilers at all, though it is not easy to find a better or more compact name. The Serpollet boiler closely resembles the Herreshoff and several other steam generators, in that it consists of a long coil of tubing, into one end of which water is pumped, and out of which, at the other end, steam moderately superheated issues.

### When the Lubricant Stops Flowing.

The grease lubricators found on the dashboard of cars are very often a delusion. These lubricators, by means of copper pipes of extremely limited cross section, are supposed to distribute the grease to the various bearings, etc., the pressure being applied to the grease by a screw. This sounds well in theory, but, if the various little pipes are disconnected, it will often be found that grease is only going through about two of them, the others being empty. If the hitherto empty ones are started by means of temporarily stopping the others, but still fail to work satisfactorily, the only plan is to use thinner grease. It is well to note this, as damage has often been done through some parts being insufficiently lubricated.

### Use of Lock Nuts.

The practice of using locks in connection with the more important nuts seems destined to become wellnigh universal. The simplest form is an ordinary split pin, and this answers the purpose, although it is not as workmanlike looking as a well designed and almost concealed lock nut.



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## The Week's Patents.

728,840. Steam Boiler for Locomobiles or other Machines. William N. Best, Los Angeles, Cal., assignor of one-half to John F. Gulick, Benjamin F. Masten and William A. Cooper, Los Angeles, Cal. Filed July 2, 1901. Serial No. 66,875. (No model.)

Claim.—1. The combination with an upright tubular boiler; of a closed disk shaped vessel above the tubes to intercept the heat that passes through said tubes and furnished with a pipe screwed into the head of the boiler and also furnished with steam outlet; and steady bolts connected with the superheater and engaging the boiler.

728,860. Motor. Cesare Campus, Naples, Italy. Filed October 15, 1902. Serial No. 127,327. (No model.)

Claim.—1. A motor comprising a circular wheel revoluble therein and having a shaft for communicating power, plunger pistons in said circular wheel, and a spring device for forcing the same apart, a double valve structure having parallel passageways for steam or other fluid under pressure, and pipes extending therefrom to opposite portions of the motor case, and eccentric devices for actuating said valves whereby steam is admitted to the motor case at opposite points with each half revolution of the circular wheel.

728,882. Electrical Ignition Apparatus for Gas Engines. Willard E. Dow, Braintree, Mass. Filed August 2, 1902. Serial No. 118,033. (No model.)

Claim.—1. In an apparatus for operating a gas engine, a source of energy, an induction coil, a sparking device operated thereby for driving the engine, a condenser, a mechanical interrupter and a vibrator, said interrupter and vibrator being in series with each other in a shunt circuit around said condenser.

728,950. Sparking Igniter for Explosive Engines. Alonzo C. Mather, Chicago, Ill. Filed September 26, 1900. Serial No. 31,190. (No model.)

Claim.—1. The combination with an explosion engine and a shaft operated thereby, of a pair of electrodes in the explosion chamber of said engine, one of which is longitudinally movable and has a fork or yoke at the upper end of its stem provided with an inclined wall between the branches thereof, forming a shoulder, an arm pivoted to and between the branches of said fork, and adapted to engage said shoulder for limiting to pivotal movement in one direction, a spring connected to one end of said arm and to said movable electrode for resisting the pivotal movement of said arm in the opposite direction, and a projection on said shaft adapted to engage said arm for actuating the movable electrode when moving in one direction, and to move said arm on its pivot and ride over the same when moving in the opposite direction, as and for the purpose set forth.

728,957. Truck. Joseph C. Moore. Cedar

Rapids, Iowa. Filed December 20, 1902. Serial No. 136,015. (No model.)

Claim.—1. A truck having a pair of wheels near its upper and lower ends, respectively, link belts connecting the upper and lower wheels at each side, belts of flexible material outside the link belts, and rigid shoes between the upper and lower wheels to bear on the upper surface of the link belts and hold them in line, substantially as and for the purpose set forth.

729,010. Vehicle Driving Mechanism. Paul Synnestvedt, Glenview, Ill. Filed October 15, 1900. Serial No. 33,085. (No model.)

Claim.—1. A vehicle frame and axle in fixed relation, a pair of driving wheels turning on the axle, a motor frame pivotally supported by the axle, and spring supported from the vehicle frame, a motor, a motor shaft driven thereby and a counter shaft carried by the motor frame, connections between the motor shaft and counter shaft, and flexible driving connections from the counter shaft directly to the said driving wheels, substantially as described.

729,079. Steering Wheel for Automobiles. Harry W. Meyers Fort Wayne, Ind. Filed January 30, 1903. Serial No. 141,174. (No model.)

Claim.—1. In a steering apparatus for automobiles, a steering post; a crank fixed at the top of the post; a steering wheel pivoted eccentrically to the outer end of the crank, and being adapted to range with its axial center in line with axis of said post when in normal position; a bolt rotatively mounted in the hub of said wheel and having a threaded lower end suited to engage in the end of said post and thereby hold said wheel in normal position; and a spring to hold said bolt in lowermost position.

729,100. Separator for Storage Batteries. Elmer A. Sperry, Cleveland, Ohio, assignor to National Battery Company, Jersey City, N. J., and Cleveland, Ohio, a Corporation of New Jersey. Filed November 25, 1901. Serial No. 83,491. (No model.)

Claim.—1. A perforated separator for storage batteries, comprising a thin sheet having corrugations formed therein to render same slightly resilient, said corrugations being formed during vulcanization or revulcanization whereby they are unaffected by heat.

729,129. Valve Coupling for Pneumatic Tires. Albert B. Catterall, Davenport, Iowa. Filed February 27, 1903. Serial No. 145,414. (No model.)

Claim.—1. A device of the class described comprising, a valve casing, a cap or cover fitting over the valve casing, said valve casing and cap being provided with interior and exterior interlocking parts.

729,140. Storage Battery. Robert Darling, Rye, N. Y. Filed December 26, 1901. Serial No. 87,180. (No model.)

Claim.—1. In a secondary or storage bat-

tery the combination with a positive element of a negative plate supported horizontally above the same, and composed of sectional units, and a conducting grid to which each of said units is independently connected.

729,178. Motor. Ernest Huber, New York, N. Y., assignor of four-fifths to Myron C. Wick, Youngstown, Ohio, and S. V. Huber, Pittsburg, Pa. Filed June 26, 1899. Serial No. 721,825. (No model.)

Claim.—1. In a motor the combination of a supply of gas under pressure, means for throwing it so as to drive the motor, a supply of liquid not capable of absorbing said gas or of being acted upon thereby, and means for causing the gas in its flow to take up a portion of the liquid and bear it along with it to aid in driving the motor, whereby the motor will be driven, but at a slower rate than if gas alone were employed.

729,240. Electric Battery. Edmund Tweedy, New York, and Isalah L. Roberts, Brooklyn, N. Y., and George R. Tweedy, Danbury, Conn., assignor to the Roberts Battery Company, a Corporation of New York. Filed May 22, 1900. Serial No. 17,539. (No model.)

Claim.—1. In an electric battery, the combination with a containing vessel, of a receptacle supported therein and forming an inner compartment, the receptacle being composed of an impervious material, a diaphragm cup, composed throughout of material which permits electrolytic action therethrough, sealed into the wall of said receptacle and projecting downward into the outer compartment, and electrodes or elements contained in said cup and the outer compartment, respectively, as set forth.

729,254. Carburetting Device for Explosive Engines. Madison F. Bates, Lansing, Mich. Filed May 4, 1901. Serial No. 53,688. (No model.)

Claim 1.—In a carburetter, the combination of a suitable case having an air-intake opening, a gasoline-intake port, a hollow transverse member crossing the air-intake port and communicating with the oil-admission port, a valve in said member for controlling the flow of oil, a stand-pipe projecting vertically from said transverse member having a central opening therethrough which communicates with the oil-controlling valve, a drip-pan around the upper end of said stand-pipe adapted to catch the overflow of gasoline therefrom, an air-intake valve adapted to control the inflowing air, said valve having a hollow stem, a gasoline-valve located in the hollow stem of the air-valve, and adapted to seat over the end of the stand-pipe, said gasoline-valve having an enlarged head which prevents it from slipping through the stem of the air-valve, and a spring within the stem of the air-valve pressing downwardly upon said gasoline-valve.

729,311. Compressible Tire for Vehicles. Henry P. Feister, Philadelphia, Penn. Filed June 25, 1902. Serial No. 113,105. (No model.)

Claim.—1. The combination with a suitable wheel-centre, of an inner compressible

# "Whitney" Chains

THE WHITNEY MFG. CO., Hartford, Conn.

tire operating as a cushion, a continuous integral exterior metallic tire having interior and exterior undulating surfaces, and means between the coinciding elements adapted to maintain them fixedly in lateral register.

729,323. Circuit-Breaker for Storage Batteries. Henry Garrett, Dallas, Tex. Filed August 5, 1902. Serial No. 118,483. (No model.)

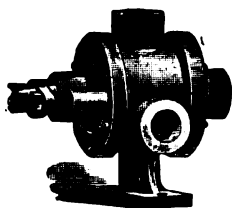
Claim.—1. A circuit-breaker for storage batteries, comprising feed-wires of opposite sign to be connected with the battery-terminals, switch mechanism for connecting and disconnecting said feed-wires, electrically operated mechanism connected by a normally open shunt circuit with said switch mechanism for controlling the same, and electrical relay mechanism connected with said mains of opposite sign and energized thereby, said relay mechanism having a contact connected with said shunt-circuit for energizing the same.

729,377. Combined Governor and Gas and Air Mixer for Explosive-Engines. William F. Meister and Winfield S. Pattin, Marietta, Ohio, assigns to The Pattin Brothers Company, Marietta, Ohio, a corporation of Ohio. Filed September 30, 1902. Serial No. 125,406. (No model.)

Claim.—1. In combination with an explosive engine, a gas and air cut off or throttle consisting of a body portion having a piston chamber opening direct into the compression chamber of the engine, an air inlet leading into the said piston chamber, a gas inlet leading into the said piston chamber and also down into an annular space around the lower or open end of the said piston chamber, a downwardly movable spring retained valve seated at and closing the lower end of the piston chamber, a series of jet openings leading through the said valve seat from the annular space around the lower end of the piston chamber, and with their lower or open ends adapted to be closed by the said valve when it is on its seat, and a piston adapted to move with the said valve operating to cut off or throttle the supply of gas and air, substantially as described.

729,467. Explosion Engine. John C. White, Decatur, Ill., assignor to William L. Oakes, Decatur, Ill. Filed March 26, 1902. Serial No. 100,134. (No model.)

Claim.—1. In a fuel feeder for explosion engines, an air conduit, a fuel chamber, a passage way for the fuel projecting from the fuel chamber into the air conduit and extending upward above the level of the fuel in the chamber, such passage way being contracted at its outlet and unobstructed otherwise, substantially as described.



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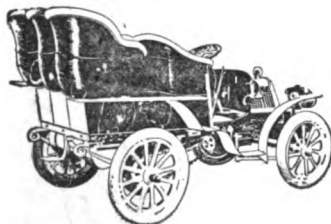
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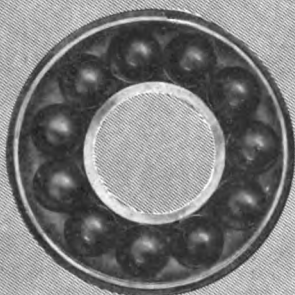
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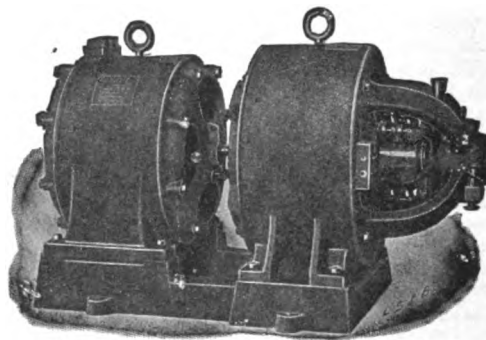
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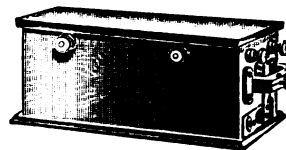
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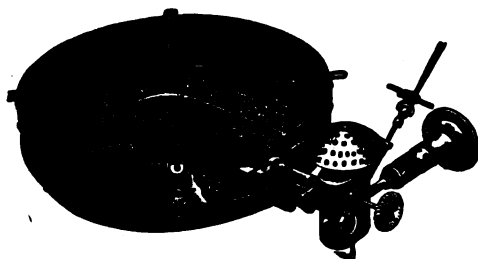


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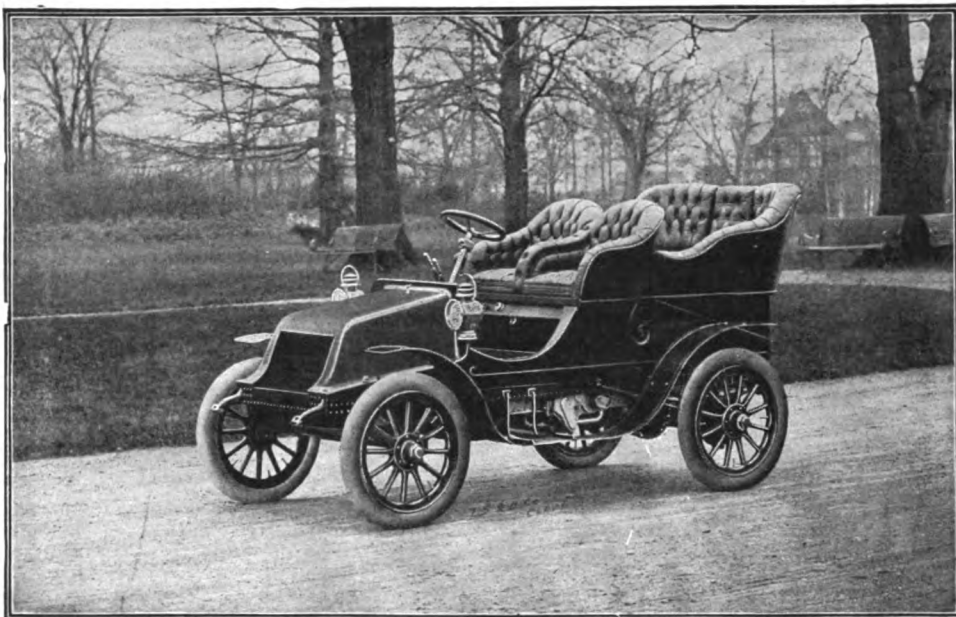
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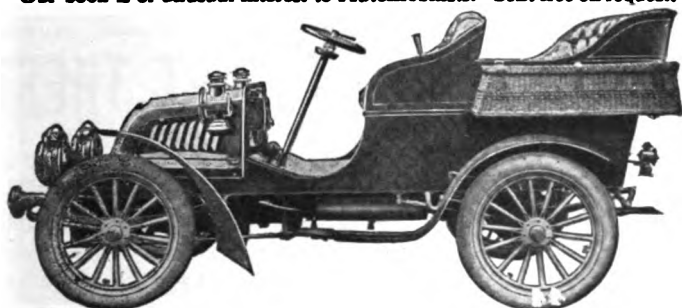
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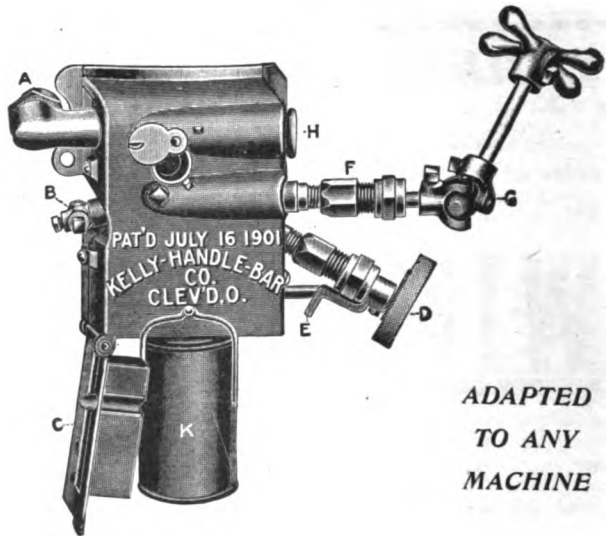
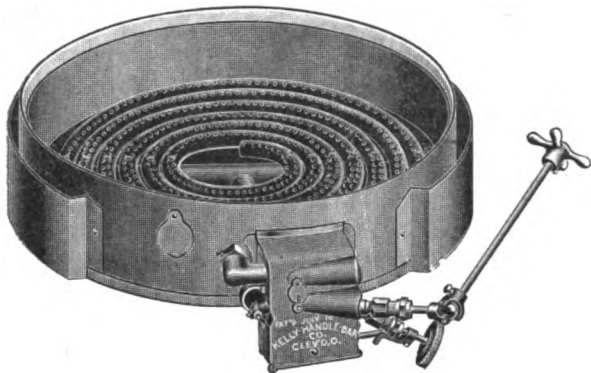
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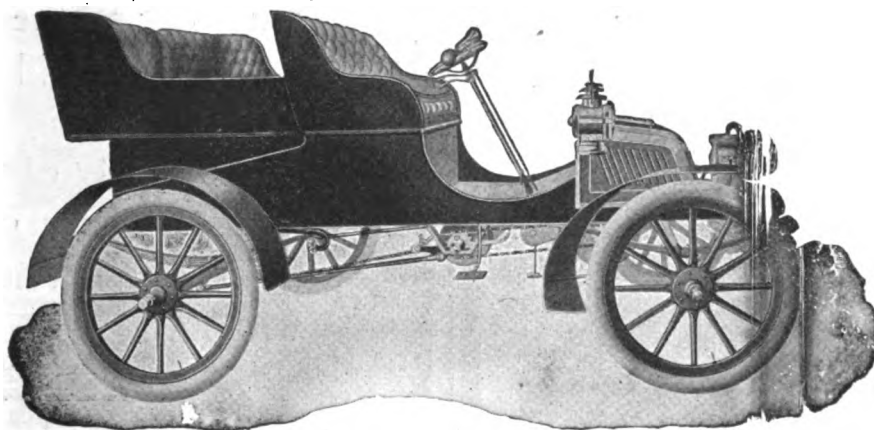
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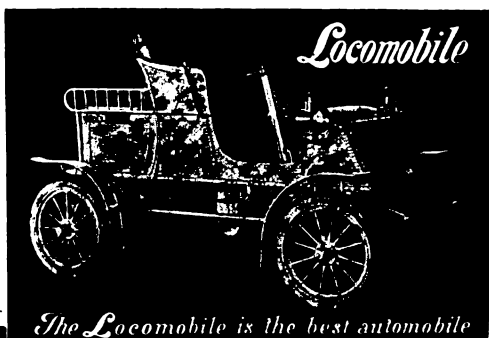
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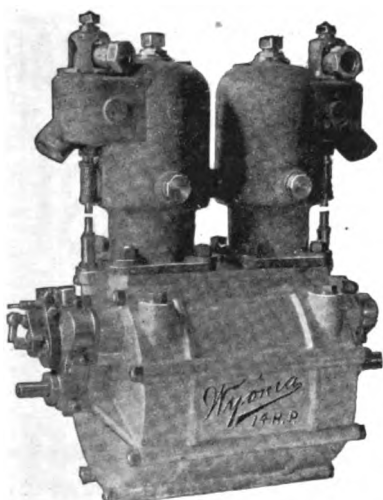


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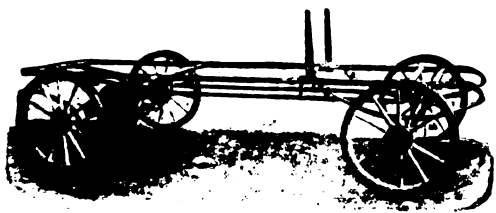
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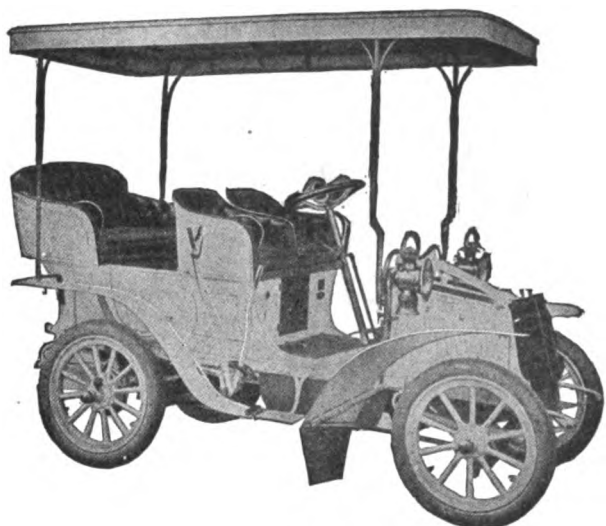


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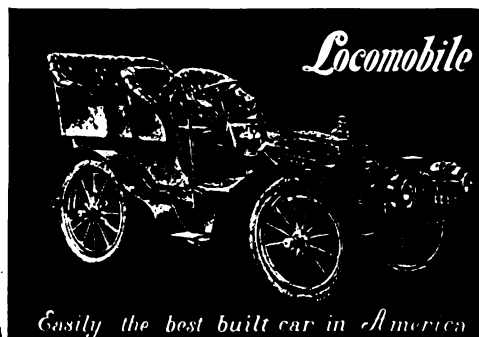
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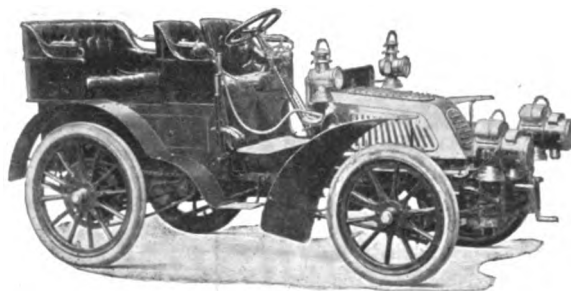
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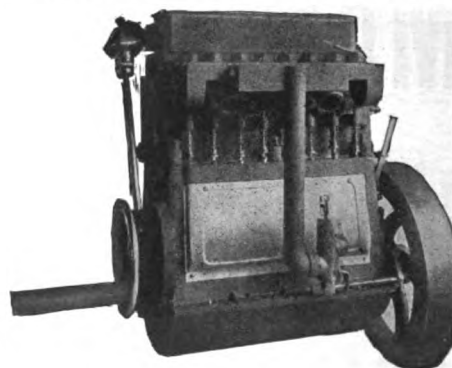
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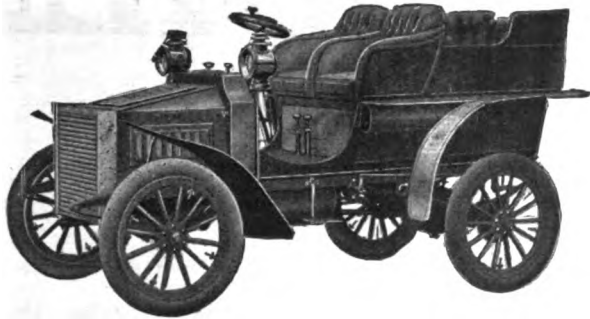
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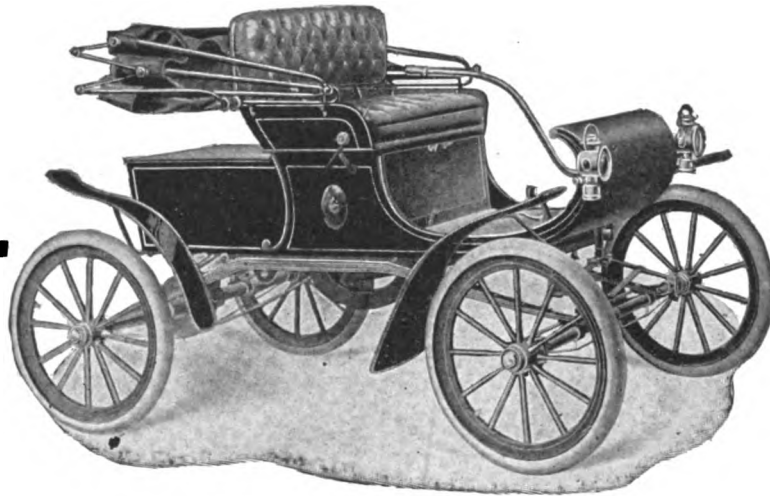
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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, June 11, 1903.

No. 11

## FIVE WIN GOLD MEDALS

### Two Commercial Vehicle Contestants Were Unlucky in not Being in a Separate Class.

On last Friday the contest committee of the Automobile Club announced its awards to the competitors who engaged in the contest for commercial vehicles on May 20-21. Nothing but the bare awards, without details, were given out, and these were as follows:

First Class—To carry 750 pounds. No. 10, Mobile Co. of America, Tarrytown, N. Y.; steam delivery wagon; gold medal.

Second Class—To carry 1,500 pounds. No. 11, Knox Automobile Co., Springfield, Mass.; gasoline delivery wagon; gold medal. No. 12, Knox Automobile Co., gasoline delivery wagon; silver medal. No. 5, International Motor Car Co., Toledo, O.; electric delivery wagon; bronze medal.

Third Class—To carry 3,500 pounds—None.

Fourth Class—To carry 6,000 pounds. No. 9, Morgan Motor Co., Worcester, Mass.; steam truck; gold medal.

Fifth Class—To carry 10,000 pounds. No. 1, T. Coulthard & Co., Preston, England; steam truck; gold medal.

The day following the announcement of the awards Arthur Herschmann, representing the Columbia Engineering Co., filed a written protest against his steam exuress wagon, which was designated No. 7 in the contest, being omitted from the list of prize winners. The Herschmann express wagon weighed 10,225 pounds, and carried 3,805 pounds of granite paving blocks. It made the best showing of any of the heavy vehicles was, in short, the only one of them that went through without some sort of breakdown and repair, but was not given a prize because the rules required that every vehicle must carry a load equal to at least 50 per cent of its weight.

Mr. Herschmann protested on the ground that it was known before the start of the contest that his express wagon would not comply with this rule because it was built to carry only 3,000 pounds, and that a special

class, designated as "miscellaneous," was created and his wagon assigned to it. His entry fee of \$25 was taken and his wagon allowed to start, and he checked as a regular competitor. Under these circumstances he claimed that he was entitled to a gold medal for having made the best showing in the "miscellaneous" class. The contest committee considered the protest, admitted its validity, and on Tuesday revised its awards by allotting a gold medal to Mr. Herschmann for the performance of truck No. 7.

### New Britain's Strong Company.

Following the purchase several weeks ago by the Russell & Erwin Co. of the Bristol Motor Car Co., came the organization at New Britain last week of the Corbin Motor Vehicle Co. The new concern is capitalized at \$200,000, and will, it is understood, at once begin the construction of automobiles at the plant of the Russell & Erwin Co., which is controlled by the American Hardware Corporation.

Immediately upon the election of directors, which resulted in the selection of P. Corbin, Howard S. Hart, Andrew J. Sloper, Charles Glover and Paul P. Wilcox, of New Britain; Epaphroditus Peck and F. S. Manross, of Bristol; Robert C. Mitchell, of New York, and Charles M. Jarvis, of Berlin, they held a meeting and proceeded to the election of officers, the following being chosen: President, P. Corbin; vice-president, Charles M. Jarvis; treasurer, Howard S. Hart, and secretary and assistant treasurer, Paul P. Wilcox.

As was stated in these columns at the time, the Russell & Erwin Co. acquired from the Bristol Motor Car Co. the patterns, drawings and patents of the gasoline car upon which the Bristol company was engaged. This and similar cars will, it is understood, be produced.

### Bates Company is Organized.

The manufacture of automobiles will form the principal business of the Bates Automobile Co., which has just been formed at Lansing, Mich. A light runabout will be turned out, but it will not be marketed until 1904. The new concern has a capital of \$60,000.

## CAUSES OF THE FIASCO

### How the Paris-Madrid Calamities Occurred, and the Several Lessons Which They Convey —Light Cars Again Prove Superiority.

Paris, May 28.—No race ever started with such brilliant promise as the one from Paris to Madrid. It was looked upon as the consecration of the power of automobilism when the road vehicle, with its huge engine, would astonish the world by its fantastic speeds and prove that its hour of triumph has come. It has always been tolerated by the authorities with a half fear that the automobile was being allowed too much liberty, but they were perfectly ready, if this liberty were not abused, to provide every facility for the development of the motor vehicle movement. This could only be done by proving that the automobile was safe even at the highest speeds. The race from Paris to Madrid, if carried through without serious accident, would therefore have had an excellent effect upon the public attitude toward the automobile, besides testing the vehicles themselves and propagating automobilism in a country where it is at present almost entirely unknown. Unfortunately this excellent result has been lost. The race, which was to have been a great triumph, has ended in disaster, and there is no telling what evil effects this may have upon the early future of automobilism.

There were 216 competitors taking part in the race, of whom 161 drove vehicles and the remainder motorcycles. The start took place on Sunday morning at Versailles. The previous evening special trains were running from Paris with hundreds of thousands of passengers, and a long, interminable line of cyclists, motorcyclists and automobilists went by road, the way being marked by myriads of colored paper lanterns, varied occasionally by the flaring headlights of motor cars. At 2 o'clock in the morning this huge crowd was pouring out of the gates of Versailles, congesting the road to such an extent that it was scarcely possible to pass. For a long while the causeway was



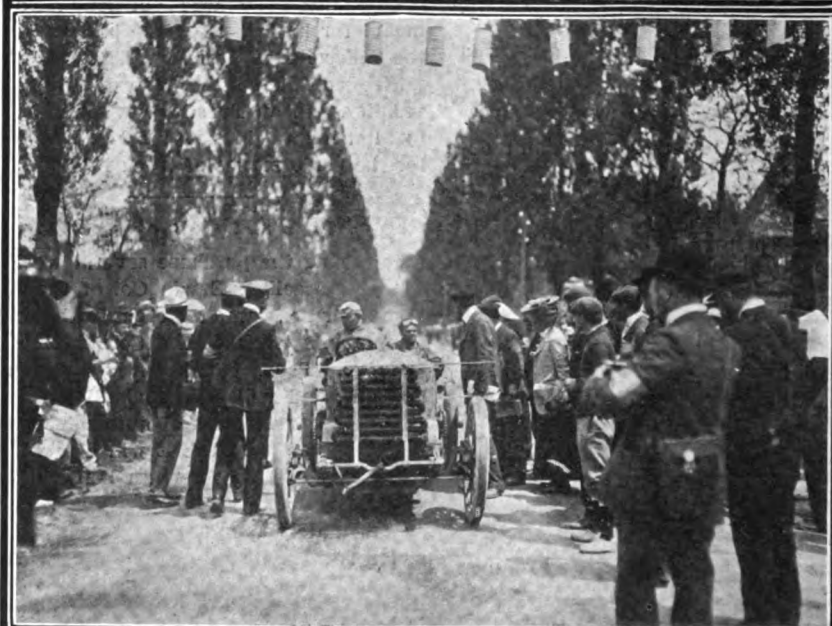
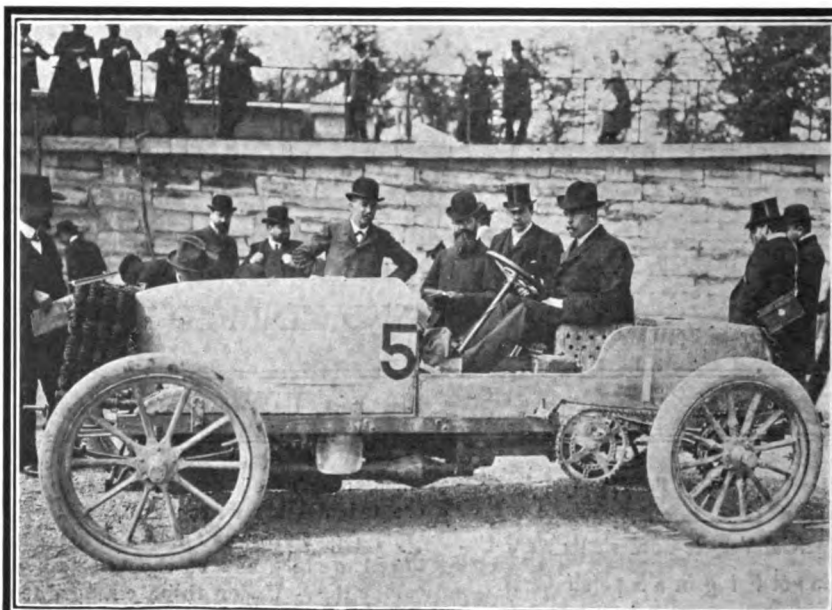
blocked with bicyclists who were slowly pushing their machines, trying to get clear, when they would continue to have a view of the cars at full speed. On each side of the road the pavements were packed with pedestrians, and out in the fields the Parisians were dining by the light of lanterns, while here and there huge storing places had been fitted up for touring vehicles. It was a wonderful sight, such as we have never seen before, and very probably will never see again. This crowd continued for miles and miles along the course, gathering in compact masses at the turnings and extending along the straight stretches almost as far as Chartres. This was one of the causes of the numerous accidents.

The race was killed by its own popularity, and, incidentally, by the terrific speeds at which the cars were driven.

And all this time the racing cars were drawing up by the side of the road at their allotted places, indicated by numbers. They looked strange and mysterious in the dim light thrown by the myriads of paper lanterns. They were monsters of undefined shape, slumbering peacefully until such time as they should be wakened up in a roar to start on their terrible race of nearly a thousand miles. As dawn broke the scene became still more impressive; the drivers had finished giving the last touches to their machines, and at 3:30 o'clock the start was given to the first car, a 45 horsepower De Dietrich, driven by Charles Jarrott. Then they continued at minute intervals, the voiturettes and light carriages going off with the big cars. Cheers accompanied Fournier on his 70 nominal horsepower Mors, for he was the strong popular favorite, and there were also the 70 horsepower Gordon Bennett Panhards driven by Chevalier René de Knyff and Henry Farman, as well as the 90 horsepower Mercedes of Baron de Caters, Hieronymus and Werner—that is to say, all the cars that are to run in the international contest in Ireland on July 2. The Americans were in strong force, with J. B. Warden, on his 60 horsepower Mercedes; Loralne Barrow, on his De Dietrich; W. K. Vanderbilt, Jr., on his 70 horsepower Mors; Terry, Heath and others, and England was represented by C. Jarrott, the Hon. C. S. Rolls, Mark Mayhew, on a Napier; Porter, Austin and Forster, on Wolseleys, and several others driving French machines. The race was of a thoroughly international character, and one of the most interesting things about it was the light it would throw on the capabilities of the French and German Gordon Bennett types of cars, for if these vehicles carried everything before them the prospects of a gigantic struggle in the Irish race would be greatly increased.

During the first fifteen miles the race promised plenty of excitement, for the Panhard of René de Knyff had already taken a couple of minutes on Jarrott, with Louis Renault close behind, followed by the Deauville of Théry and the Mercedes of Wer-

(Continued on page 409.)



LORRIANE BARROW, WHO STRUCK A DOG AND WAS SEVERELY INJURED.  
FIRST FOREIGN ARRIVAL AT BORDEAUX.  
CHEVALIER RENE DE KNYFF AND HIS PANHARD.



## LAST CUP HUNTER SAILS

**L. P. Mooers off to Join Winton and Owen, After a Royal Send off in New York.**

On Wednesday Louis P. Mooers, of Cleveland, the third member of the team that is to represent America in the race for the Gordon Bennett Cup, sailed for the scene of the contest on the White Star steamship Teutonic. Mr. Mooers was accompanied by W. H. Starin and W. J. Morgan, the latter having been chosen on the day before sailing to go along and attend to details of preparation for the race, and also act as a sort of trainer and manager in helping Mr. Mooers get into condition for the physical strain.

Instead of taking both the new 80 horsepower Peerless and the 40 horsepower car of last year, as was at first intended, only the new racer was taken by Mr. Mooers. When asked the reason for this he explained that it had been overhauled and considerably altered since the trials on Long Island, and that it was now running so perfectly that there was no need to take along a substitute. The big racer has been fitted with a novel hood of wire netting that admits the air to every part of the engine, yet protects it from flying sticks and stones.

C. G. Wridgway, who it was thought would accompany Mr. Mooers as a substitute and perhaps drive the car, did not go because of the exacting demands of business here.

On Tuesday there was a farewell luncheon, arranged at the Criterion Hotel, in New York, by L. H. Kittredge, of the Peerless Co., at which the representatives of the press and Mr. Mooers and a few others were the guests. It was a most enjoyable affair. A fine repast was served, and the expressions of good will toward the cup racer were hearty and sincere. Among those present were Harlan W. Whipple, of the race committee of the Automobile Club; S. M. Butler, the secretary; L. H. Kittredge, C. G. Wridgway, A. G. Andrews, T. E. Deckert, H. M. Duncan, O. E. Hart, E. H. Cox, and W. P. Mallon. In all there were twenty-seven at the tables, and speeches were exacted from nearly all.

Charles B. Shanks, of the Winton Motor Car Co., followed Messrs. Winton and Owen to England last Saturday, sailing on the Umbria.

## A Satisfying Olds Product.

A satisfying bit of work has just been produced by the Olds Motor Works in the form of a new catalogue of Oldsmobiles. It is not because it is a creditable piece of work in regard to printing and illustrating, though this is eminently true, but because it tells something, and the something is what prospective buyers want to know, that the booklet is good to look upon and peruse. It tells in outline the history of the effort and

accomplishment in producing Oldsmobiles; tells why they are popular, what they have done and will do, and gives the particulars of construction that one often seeks in vain in catalogues. By means of well printed half-tones some of the feats in hill climbing, mud ploughing, etc., are shown. It is a catalogue that is apt to make buyers, because it satisfies.

## Now Secretary Gilson.

It is now Secretary J. W. Gilson, the genial sales manager of the Hartford Rubber Works Co. having last week received a well earned promotion. W. H. St. John, who filled the office of secretary and treasurer, resigned, and the double vacancy was filled



J. W. GILSON.

by the election of Gilson to the secretaryship and F. H. Turner to the treasurerhip.

Few men are better known or liked than J. W. Gilson—"Jimmie," to all who know him at all well—and his zeal in pushing the sale of the Hartford product was earnest and unrelenting. He entered the employ of the company in 1896, and was advanced successively to the positions of chief traveler and sales manager. His latest advancement is in direct line with the previous ones.

## Mercedes Works Burned.

A special dispatch from Cannstatt, Wurttemberg, states that the Daimler Motor Car Works were burned Wednesday, that the Mercedes cars built to compete in the race for the Bennett Cup were ruined and that a large stock of other cars was destroyed.

## Lancaster Men Subscribe to Stock.

Nearly \$50,000 worth of stock is said to have been subscribed for the Conestoga Automobile Co., Lancaster, Pa. H. L. Raub and Paul Heine, both of Lancaster, are among the subscribers. A 300 by 140 foot building is to be erected.

## FIRST BAILEY LAW CASE

**Two Motor Bicyclists Acquitted of Speeding Under the "Unbuilt up District" Provision.**

What is, so far as is known, the first case in New York City in which the new Bailey law was invoked, was decided on Wednesday morning in Special Sessions by Justices Mayer, Wyatt and Olmstead. As it happens it was a case against motor bicyclists and not automobilists, which may raise the question later as to whether the law applies to them or not. That point was not raised in the case this time, however, but the defendants were discharged.

The accused were Gus Lippmann and Adolph Jaeger, members of the Greenwich Wheelmen of New York. They were riding motor bicycles on 189th street near Jerome avenue on May 17, when they were arrested by Policemen Donahue and Kiely. They were charged with violating the law by riding faster than eight miles an hour.

The case came to trial on May 28. The motor cyclists were represented by Attorney Clarence K. Maguire, of their own club, who plead no violation of the law and plead for a dismissal on the ground that under the Bailey law the defendants were entitled to exceed eight miles an hour in the territory where they were arrested—were entitled to travel at the rate of fifteen miles an hour—because that is a portion of the city where the houses are 100 feet apart, and the Bailey law says that speed in such sections shall not be restricted below fifteen miles an hour.

Decision was reserved on the day of the trial, but on Wednesday the three judges named handed down a decision for the defendants.

## Buckmobile Meets and Elects.

The annual meeting and election of the Buckmobile Co., Utica, N. Y., took place last week, and the following directors were elected: A. Vedder Brower, H. E. Streeter, W. H. Birdsall, Samuel Campbell and A. J. Seaton. The directors elected these officers: President, A. J. Seaton; vice-president, Samuel Campbell; secretary and treasurer, A. Vedder Brower; manager, W. H. Birdsall, and superintendent, H. E. Streeter.

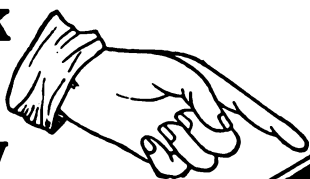
## To Sell the Coffee Gear.

Arrangements have been made between R. W. Coffee & Co., Richmond, Va., and the F. A. La Roche Co., No. 652 Hudson street, this city, under which the latter will undertake the sale of the Coffee transmission gear. This gear, which was recently placed on the market, is of the planetary type, having three speeds, forward and a reverse, and is made in three sizes.

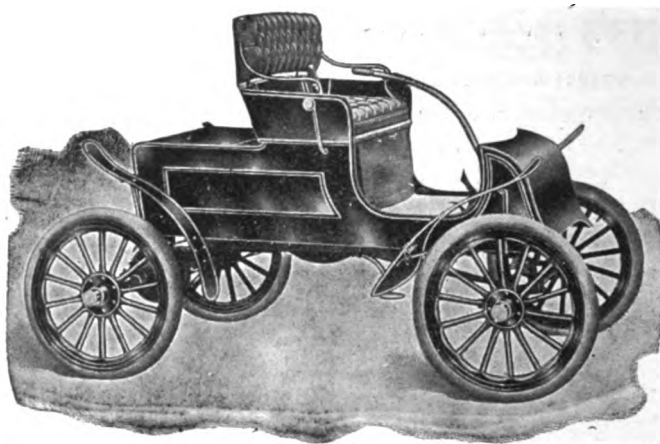
## President French Passes Away.

John L. French, president of the St. Louis Motor Carriage Co., died at his home in that city on May 23. He was injured while in Pittsburg about a year ago, and complications which set in resulted in his death.

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Entered as second-class matter at the New York, N. Y., Post Office, November, 1900.

NEW YORK, JUNE 11, 1903.

### Vale the Heavy Car.

It is only now, when we have had time to fully digest the lessons of the Paris-Madrid race, that we are able to realize how far astray a considerable section of the trade and public has gone on the subject of motor car powers and speeds. And it is probable that nothing but such a complete fiasco as that unfortunate event was would have availed to turn those referred to from their course.

Reference is had not alone to the casualties of the contest, lamentable as they were, but also, and even more strongly, to the misdirected energy, represented by such concrete evidences as time and money, that was responsible for the birth of such monsters as went to the bad on the fatal white road that stretched from Paris to Bordeaux. That was sheer waste, waste even had the heavy cars proved victorious in the halted contest, for no useful purpose could have been achieved by such cars that could not

have been achieved equally well with smaller ones.

When the Paris-Vienna race passed into history the cry went up that the heavy car was doomed—that the desire for power had reached heights that it would never reach again. The triumph of the light car was complete and indisputable. It had met its mastodonic opponent, tried the game of speed with it and emerged from the contest completely victorious. Therefore it was time to pause, and even to retrace some of the steps that had been taken.

But as time passed the vividness of the impression faded. It was contended that it was faulty construction linked with bad roads that caused the wreck of the heavy cars. With better roads and the faults and weaknesses corrected in the 1903 race, the latter would have a very different ending.

And so, partly because man does not like to turn back until he is absolutely forced to do so, many of the makers produced bigger and more powerful cars than had been ground to pieces over the Alps, holding, with a curious fatuity, that they would stand the ordeal of the Pyrenees without meeting disaster.

The result is now known. On the finest roads of the world—those between Paris and Bordeaux—long before the real test came, the big Panhards, Mercedes, Mors, etc., collapsed, meeting disaster after disaster, until one alone—by a fortunate chance that of Gabriel—was found among the survivors. And it eclipsed the 30 horsepower Renault only by a small and utterly disproportionate margin.

It is now plain that, whether or not there should be another great road race, the 100 horsepower car is destined to disappear. With it the indifference to weight that has been such a remarkable feature of motor car construction will cease to prevail. Less power and less weight will both be called for, and it needs little discernment to divine that the call will be heeded.

### What is the Legal Rate?

It would be interesting just now to know what are the legal rates of speed in various parts of New York City. In one way it might be worth the while of the law committee of the Automobile Club to find out and announce them, and in another way it might not. According to George F. Chamberlin, of the Automobile Club, expressed merely as an offhand personal opinion, the rate of speed in Manhattan below 110th street is

five miles an hour for horses and eight miles an hour for automobiles, and above 110th street there is no limit; or it may be there is no limit for automobiles in the built-up part of the city, the five mile an hour ordinance being nullified by the Bailey law.

The situation seems to be about this: The revised rules of the road are still pending before the Board of Aldermen. There have been no ordinances regarding road rules adopted since the consolidation in 1897, and under the charter all the ordinances in force before the consolidation remain operative until superseded by new ones. Under the old ordinances the limit of speed for vehicles of all sorts was five miles an hour below 110th street in Manhattan. Brooklyn, Staten Island and Queens County had different rules, which are still operative. Under the Cocks law the limit of speed in New York and all other cities and incorporated villages was eight miles an hour, the Cocks law rendering inoperative any ordinance that restricted speed to anything below that limit. Although it has been disputed, it seems now to be pretty generally agreed that the Cocks law was repealed by the enactment of the Bailey law. The Bailey law, however, also prohibits any ordinance, under whatever law adopted, from requiring a slower rate than eight miles an hour in the built up portions of cities on the part of automobiles. The Bailey law, though, does not of itself fix any limit for any place. It provides that cities, towns and counties may enact their own laws, but that they must not put the limit below fifteen miles an hour in the places where the houses are one hundred feet apart, or below twenty miles an hour in the open country. Unless the towns and cities enact laws for their localities there is therefore no limit, and this appears to apply to New York City above 110th street, which is not affected by the ordinance passed before the consolidation. The only limit in such places would be that imposed by the general law prohibiting reckless driving that endangers the safety of others.

Mr. Chamberlin says that if he was arrested for speeding he would want to know at once under what section of the law he was detained. If he was told it was the general law regarding reckless driving, he would not have a word to say, but if it was said to be under any specific ordinance or statute, he would demand to know what the speed limit is.

As Brooklyn, Richmond, Queens and a part of Westchester are also still under the old

ordinances adopted before they became parts of greater New York, similarly anomalous conditions undoubtedly exist in those boroughs, and it would be worth while to have somebody in authority lay out a schedule of the different laws now operative in the metropolis of this glorious country.

### A Cash Business.

To an extent almost unparalleled the automobile business has heretofore been a spot cash one. Many concerns have even gone so far as to insist upon the receipt of cash before the car is delivered, and nothing will induce them to swerve a hairsbreadth from this course. The most unimpeachable standing or credit does not avail to obtain the car under any other terms. Other concerns have extended credit to customers who have an account, but even this has been regarded as a little more lax than the occasion demanded.

Much as the trade might wish his ideal condition of affairs to continue, it is very evident that it could not. Already there are indications that a change is coming. The number of people who desire to invest in automobiles, but who have not the entire purchase price in cash, is very great and certain to increase with every month that passes. The wall of resistance raised to it resists attack for awhile, but as the assaults gain in vigor the time when it will fall gets appreciably nearer.

As yet it is only weakened. But that easier terms will be offered in the fairly near future, if they are not being offered occasionally even now, is as certain as anything can be.

### Signs Must be Erected.

Before the Bailey bill was signed it was claimed by its defenders that in many places the village and town authorities would fail to take advantage of its provisions with regard to the eight mile an hour rate within a half mile of postoffices, by neglecting to adopt the ordinance and erect the signs necessary to make the law operative in this respect. This claim seems to have been justified to some extent by what has happened since the law went into effect. Few signs have been reported as having been erected up to the present time, and if foolish automobilists do not impose upon the fact unduly by running at unreasonable speed through village streets it is possible that there will be large territory without speed restrictions of any sort.

It is worth the while of automobile users

to bear in mind the fact that the signs must have a certain wording in order to be legally effective. It is a point not generally appreciated that the Bailey law prescribes the exact wording for the half mile limit signs, and, being a criminal statute, it must be complied with to the letter, else no conviction can be made under it that will hold. The law says: "Upon such sign there shall appear clearly the words, 'Slow down to eight miles,' and also an arrow pointing in the direction where the speed is to be reduced." It may prove quite important to remember this, as it is known that up in Westchester County signs have been prepared which do not at all comply with the law, but have on them an original wording to the same effect. A highly reputable lawyer advises the Motor World that arrests made inside the limits of this sign are illegal and that no court in the land would sustain a conviction if one was obtained for speeding past the sign. It is not that such lapses on the part of village authorities should be taken advantage of, but in order that those who are unfortunate enough to misjudge their speed and be trapped inside the limit may be informed of everything that may help them that this technicality is pointed out. While unalterably opposed to all laws that discriminate against automobilists, and all forms of oppression under the law, the Motor World never has meant to be interpreted as condoning reckless driving anywhere.

### Cardan Shaft Transmission.

When the French house of Renault definitely adopted the propeller shaft type of transmission the contention that it would in a few years be generally copied and come into extensive use would, if advanced, have been received with amusement as well as incredulity. As it was, the novel system was treated with scant ceremony, those not hostile to it being indifferent.

But its introducers kept steadily on, unmindful of the jeers and sneers that were flung at them. To-day their foresight is vindicated, and in a remarkable fashion. The shaft drive is, if not the most used, the most talked of and argued of all the systems, and it is gaining ground more rapidly than any other.

Until the present year the individual chain drive to the rear wheels was considered the only system of transmission suitable for heavy cars, just as the chain drive to a live rear axle was regarded as the best method to adopt with light vehicles of the runabout

and similar classes. But within the last six months the shaft system has gained so much ground that the rule referred to can scarcely be regarded as still binding. If not heavy cars, medium weight ones at least are now equipped with the cardan jointed shaft, and the half-expected troubles have not resulted.

As coming events cast their shadows before, so racing car design affords a pretty fair idea of what we may expect in the future road cars. It is worthy of note, therefore, that while the French and German cars to be driven in the Bennett Cup race are equipped with the individual chain drive, both the British and the American cars depart from this practice, all having live rear axles and propeller shafts.

There is so much to be said in favor of the latter method of gearing—the thoroughly mechanical design, the ease with which the working parts can be completely protected—that it needs only proof that a long steel shaft will drive heavy cars without distorting or binding to insure their general adoption.

Proof of this sort is likely to be accumulated within a very short time—if, indeed, the matter is not really settled now. If present indications go for anything, the result will be a still greater popularity for the shaft method of transmission.

### The Real Issue

A New York lawyer is quoted as saying that it would take at least two years to get a decision from the Court of Appeals on any disputed point in the Bailey law, and that automobilists might therefore better devote their attention to a campaign for the passage of a new and more reasonable law.

This is begging the question. What we want to know is whether or not the automobile is a vehicle the use of which abridges a man's rights on the highways. We want to know this, not only with regard to New York State, but regarding every State in the Union—in short, the constitutionality of all licensing and taxing laws should be tested. We want a decision from the highest courts upon the equity of making fish of one sort of vehicle and fowl of another. We insist that "the horse has no paramount right to the roads," that the automobile should be as free to come and go as the farm wagon, without tax or tag, and we want the present oppressive laws tested in order that certain definitely restrictive lines may be drawn for the framing of laws consonant with common sense.

## CAUSES OF THE FIASCO.

(Continued from page 404.)

ner. Beyond Rambouillet the French representative began to have trouble with his tires, and he lost so much time in this way that he saw it was useless to continue. Fournier's luck also deserted him, as it did in the race last year. He was running very badly through faulty ignition, and after losing hours tinkering about he found that his magneto was deranged and beyond repair, so that he also joined the big army of stranded automobilists. The competitors were tailing off in a long line, with Louis Renault leading and followed by Jarrott, Werner, Théry, Stead, Baras, Tourand and Mme. du Gast, and for four hours the belated cars continued to pass through the controls. The pace of the leaders was terrific. On one stretch of road Louis Renault was timed as running at the rate of close on ninety miles an hour, and this, too, on a 30 horsepower light carriage; such a speed had never before been attained in a race.

## MAD FLIGHT OVER A WHITE ROAD.

It was simply a mad flight over a white, dusty road, fairly flat and straight for most of the way, and every inch of it known to the competitors; but in a race of this kind even the most perfect knowledge of the course avails little when distance is annihilated, by the speed, and the competitor does not always know where he is. All the turnings, level crossings and other points requiring caution were supposed to be signalled by flags, but in some cases the men intrusted with this task neglected their duty, with the result that at least one fatal accident arose from this cause. And then there were the trees bordering the route. There was little hope for a car if it should leave the road at full speed, for it would either smash up against the trees or mow down the spectators, and the driver's existence as well as the lives of others depended on his following the white ribbon of route for close on 350 miles. Had the course been kept quite clear most of the competitors would have reached Bordeaux without accident. But the public showed a recklessness that was absolutely criminal, though whether through ignorance or for mere bravado it is difficult to say; probably both these reasons will suffice to explain the stupid attitude of the spectators. They seemed to have no idea of the speeds at which the cars were travelling. They crowded over the course and opened out as the cars approached, and after the vehicles had passed closed up again. Some idiots danced in front of the cars, and others ran across the road in front of them, just to show an admiring public that they were not afraid. Children darted backward and forward, and it was in trying to avoid one of them that Tourand, on his Brouhot, knocked down and killed two soldiers as well as another spectator.

But what can be said about the race when the course was marked with so much devastation? At least half a dozen lives were lost,

scores of limbs were broken, and wrecks of cars were lying about all along the route. No one had the heart to follow the race when it was leaving such a terrible trail behind it. The only thing that people hoped for was that the race would end without adding still further to the list of casualties.

## GREAT CRUSH OF COMPETING CARS.

Another serious element of danger was the number of cars competing. Leaving Versailles at intervals of a minute, some of the faster cars soon found themselves in groups almost together, and for miles and miles they were racing alongside of each other, making a desperate effort to get the lead. Just imagine two vehicles racing in this way, with only a few yards on each side of them, and running at seventy miles or more and being obliged to follow at the same time the sinuosities of the road! With one car faster than the other the struggle was brief, but when both were travelling at about the same speed the result was inevitable. Early in the race a Clément and Mors collided, and both flew off the road and smashed up, the drivers and mechanicians fortunately escaping without serious injury. Many a competitor felt his hair stand up at the narrow escapes, and Gabriel, on his winning Mors, went into a cold sweat as a boy ran across the road in front of him. People are saying that the Paris-Madrid race was overtaken by a strange fatality, but it is really lucky the accidents were not more numerous.

## LOUIS RENAULT IN FRONT.

Meanwhile Louis Renault was forging ahead, with Jarrot (De Dietrich), Baras (Darracq), Théry (Decauville), and Marcel Renault in hot pursuit. This does not represent the actual positions of the competitors, as those who had started toward the last were moving up rapidly in the ranks, and among these were Mme. du Gast (De Dietrich), whose driving was really remarkable; Gabriel (Mors), J. B. Warden (Mercedes) and Stead (De Dietrich). Mme. du Gast is a prominent member of Parisian society, and is a lady renowned as much for her beauty as for her wealth and intrepidity. By her performance in the race she has classed herself as among the most skillful automobilists of the day. Marcel Renault was steadily improving his position, and had had a dust up of several miles with Théry when he passed him near Couhé-Vérac. Just as he had got in front Marcel Renault swung round a bend at full speed. It can only be supposed that in the excitement of the struggle Marcel had not seen the corner or the caution flag, and, once in the bend, he could only rely on his steering to get safely through. The wheels followed the road fairly parallel, when the front ones sank in a rut and the car swerved. At such a high speed this was fatal. The car spun round, and Marcel was thrown against a tree. His skull was fractured. Théry sent a doctor from the next control, and meanwhile Maurice Farman stopped and gave what aid he could to the injured man, who was lying

apparently dead. He was conveyed to Jouhé-Vérac, where he lingered two days and died without recovering consciousness.

The death of Marcel Renault was a terrible blow. He was one of the firm of Renault Frères, and his brother Louis was leading in the race, quite unaware of the disaster. Though only thirty-one years of age, his career as an automobile engineer had been a remarkably successful one, and from small beginnings he and his brother had built up one of the biggest automobile business in Paris. It was he who introduced the cardan transmission which was subsequently employed on nearly all the light carriages, and it was through his skill and conscientiousness that the Renault cars have acquired a worldwide reputation. The two brothers have always raced together, and, singularly enough, whenever the one has secured victory the other has come to grief. In the Paris-Berlin Louis won in the light carriage class, and Marcel had an accident; in the Paris-Vienna Marcel won in all classes and Louis had his wheels smashed in collision, and now, when Louis arrived victoriously at Bordeaux his brother had a presentiment that he was running a serious risk. He had not driven a racing car since the Paris-Vienna event, and some time ago, when his men came out on strike, he told them that he was not sorry to have an excuse for not building his racing cars. He knew that the danger was increasing with the speed, and he raced against his will. This is one of the penalties that have to be paid by the successful automobile engineer.

## PORTER COMES TO GRIEF.

While Louis Renault, Jarrott, Baras, Théry and others were flying over the hot and dusty road toward Bordeaux, with a long line of vehicles racing after them, the tragedy was continuing, with its tale of overturned cars, fatalities and accidents of all kinds. One of the Wolseleys, driven by a private owner, Mr. L. Porter, was nearing a level crossing which he approached at full speed. There was no caution flag, as it appears that the man in charge had gone home to his lunch. The car collided with the gate-keeper's house, and Mr. Porter was thrown a distance of several yards. When he had recovered from the shock he saw the car in flames, with his mechanician, an Irishman named Nixon, underneath and completely incinerated. It would seem that Nixon was killed instantly at the moment of the collision. Before starting Mr. Porter thought of the possibility of an accident, and, being of the opinion that in case of accident the man behind the wheel would run the greatest danger he handed notes for \$1,200 to Nixon, so that he would be able to pay all expenses in the event of Mr. Porter being killed. Unfortunately, the fear of accident was verified, but the results were quite different from what Mr. Porter had expected. The tale of disaster did not end here, for on the way to Libourne two other serious accidents took place. Stead was racing along



side J. Salleron, on a Mors, when the latter swerved against the De Dietrich, and in trying to avoid a collision, Stead ran into a tree and smashed up. At first it was reported that he was killed. Happily he had nothing worse than a fractured shoulder and severe bruises, from which he is already recovering, but for the time being the rumor caused a painful sensation among those of who were waiting at Bordeaux. Mme. du Gast stayed with Stead for three hours, despite the entreaties of the injured man, whose only thought was for the De Dietrich cars, and this loss of time makes the performance of Mme. du Gast the more remarkable.

A still more terrible accident befell Mr. Loraine Barrow near Libourne. He was travelling at a very high speed, when he tried to avoid a dog, and in so doing the car dashed into a tree, when the mechanic was thrown against it head foremost. He fell dead, with the top of his head smashed in. Mr. Loraine Barrow was picked up insensible, with serious injuries, and he is still so far suffering from the shock that it has not yet been possible to perform an operation on him. There is every hope that he will recover.

#### MANY MINOR ACCIDENTS.

The list of casualties is a long one. M. Georges Richard was thrown, and is badly injured; a lady bicyclist who was watching the race had her legs crushed to such an extent that they have had to be amputated; a boy was knocked down by a car, and has ever since been in a delirium, shrieking that the automobiles are coming down upon him; and, as for the minor accidents, their number will probably never be known. It was an awful day, and, now that it is over, we are wondering whether it is really a fatality or the result of bad organization. Certainly the organization was very bad, indeed.

And what can be said about the race, except to give the bare results? At Bordeaux we were all in a state of consternation, for when Charron came in with a fully laden touring car, having covered the course in less than sixteen and a half hours, he spoke of having passed a number of dead bodies, with vehicles turned up all along the road, and M. Serpollet inveighed violently against the organization, declaring that he would not be surprised to hear of a still more considerable number of fatalities. These statements, exaggerated though they certainly were, seemed to be partly borne out by the small number of vehicles that came to the control in anything like a reasonable time.

Louis Renault was the first to arrive, followed by Jarrott and Gabriel, but in point of time Gabriel, on his 70 horsepower Mors, was first, having covered the 342 miles in 5 hours 13 minutes, representing an average of something like sixty-six miles an hour. Louis Renault was second in 5 hours 40 minutes, and then followed Salleron (Mors), 5 hours 46 minutes; Jarrott (De Dietrich), 5 hours 51 minutes; J. B. Warden (60 horse-

power Mercedes), 5 hours 56 minutes; Baron de Crawhez (70 horsepower Panhard), 6 hours 1 minute; Voigt (C. G. V.), 6 hours 1 minute; Gasteaux (60 horsepower Mercedes), 6 hours 8 minutes. Altogether 111 cars and motor cycles arrived at Bordeaux in less than twenty-four hours, so that practically only 50 per cent of the starters finished the journey; this, too, over one of the finest roads in the country, well known to all automobilists, and offering less danger than probably any other route.

#### LIGHT CARS SCORE AGAIN.

The most striking result of the race is the crushing defeat of the giant machines. Two of the Mors vehicles driven by Gabriel and Salleron did well, the former covering the course at record speed, and to this extent it may certainly be said that it is possible to attain higher speeds with higher powers, but against this must obviously be set off the greater risks of accidents and derangements. Moreover, the performance of Louis Renault would seem to show that the gain in speed with higher powers is not so much as might be expected, since Gabriel only beat Renault by 26 minutes, the one having an engine of 70 nominal horsepower and the other only 30 horsepower. It is, therefore, not necessary to put in abnormally high powered engines in order to increase speeds. A light vehicle with a better utilization of power will do better than a heavy vehicle with a huge engine. Only one of the new Panhards covered the course in less than seven hours, and the first 90 horsepower Mercedes was fourteenth, being beaten by the Decauvilles, Darracqs, De Dietrich, and even by the Serpollet steam cars. In the race the new Mercedes were a failure, but whether this was due solely to accidents it is difficult to say. Werner showed up fairly well early in the contest, but was unable to finish, and Hieronymous took nearly ten hours to cover the course.

#### SPEED TOO GREAT FOR ROADS.

The race has taught makers two things—the one that the speeds are now too high for contests on the public highways, and the other that they have made a miscalculation in constructing their huge vehicles. In such weather as we had on Sunday the motors got terribly hot; in Henry Farman's Panhard the aluminum crank chamber actually distorted with the heat, and with the bearings out of alignment the crankshaft seized. The strains caused by the working of these big engines are also too great, and this was apparently the cause of derangements which put so many cars out of the race. It is evident that the days of racing monsters are at an end, and that makers will see that they must enter upon a more rational construction of vehicles.

It was, of course, a foregone conclusion that the continuation of the contest would be prohibited on French territory; the order from the Minister of the Interior reached Bordeaux on Monday morning, and the Automobile Club then discussed the advisability of running the cars to the frontier as tour-

ists and resuming the race to Madrid. In this discussion the majority of the makers showed clearly that they had been greatly impressed by the incidents of the race. They could not overlook the fact that the danger of racing at these high speeds was much greater than they had expected, and many of them said that speed contests had gone far enough. A large number of them decided to proceed no further, for if such accidents could happen on such a magnificent road as the Paris-Bordeaux course, how could they expect to avoid them on the indifferent roads of Spain? The proposal to continue as tourists to the frontier was abandoned when advices came from Spain to the effect that the government of that country had withdrawn its sanction for the race, and thus the Paris-Madrid race fell through—an absolute and deplorable failure.

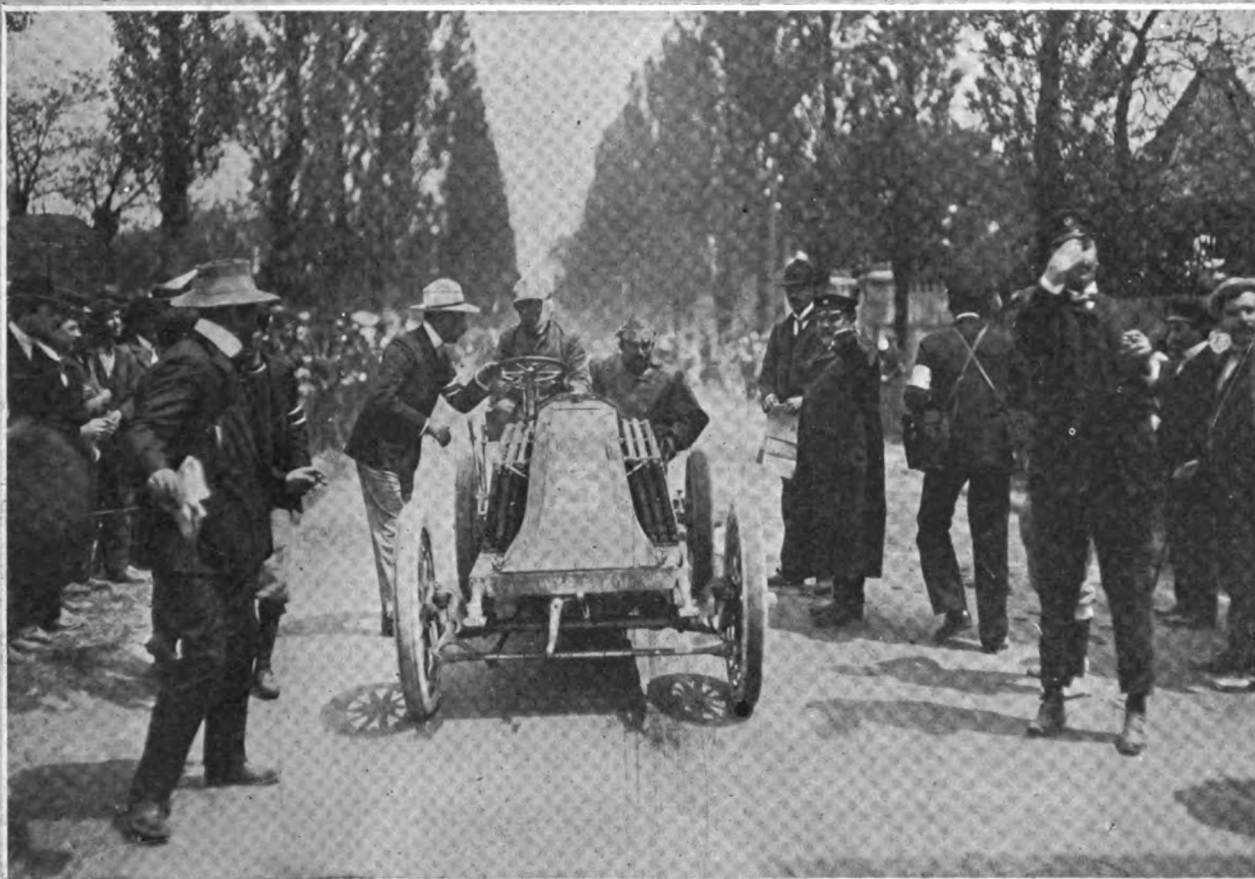
The French Government carried its precautionary measures still further. When the cars arrived in Bordeaux they were put on exhibition, and orders came down that none of the cars be allowed to leave without a written sanction from the prefect, this being only given on the understanding that the vehicles should be conveyed from the exhibition grounds and put on railway trucks for their destination. They were not allowed to leave with their own motive power.

#### SPANISH FESTIVITIES SPOILED.

In Spain the interdiction of the race was a positive disaster. A week of festivities had been organized for the automobilists, and the hotel keepers and other tradespeople had made vast preparations for the visitors. The fêtes were suppressed and the hotels were left empty. The whole city seemed to be laying under a cloud, as if decorations had been put up for a wedding and were now being taken down for a funeral. The touring caravan was, of course, well received, but the reception was utterly devoid of enthusiasm, because every one was so disappointed.

And what will be the effect of the race on automobilism generally? It is to be feared that the effect will be serious—at all events until the sensation has simmered down and the incidents are almost forgotten. They will always be remembered whenever there may be a proposal for further racing, and on this account it may be taken for granted that no more racing on the public highways will be allowed in France. The Paris-Madrid event has killed long distance speed events, though whether for all time it is impossible yet to say. Some of the local authorities are so impressed by the accidents that some of them have already passed new bylaws limiting the pace of automobiles through towns at ten kilometres an hour, which is no more than an athletic man can walk, and it is said that the French Government is about to revise the automobile regulations. On the whole, the situation is anything but encouraging. It is, however, safe to say that if the government finds it necessary to enforce new regulations it will not make them of an oppressive character, for the industry is too vast to be hindered in any way, and there is every reason for hoping that we shall soon get over the evil effects of Sunday's racing.

THE TWO LEADERS IN THE PARIS-MADRID FIASCO.



LOUIS RENAULT, FIRST TO REACH BORDEAUX.  
GABRIEL, 70 HORSE POWER MORS, WHO MADE FASTEST TIME.

## DENVER ENDURES

Hold a Contest in Which Nearly all the Cars Come Through Finely.

Eighteen cars started from Denver, Col., for Palmer Lake and return, a distance of about seventy-five miles, in an endurance contest on Saturday, May 30. Fifteen of them finished the run in good time, the last one reaching Denver only forty minutes behind the first arrival. All of the cars came through in splendid shape. A schedule,

and by the time Denver was reached the faces of most of the riders were raw from a combination of sun and wind.

The cars taking part in the run and the time of their arrival at Denver is given in the following table.

Time.	Owner.	Car.
5:14	E. R. Cumbee.....	Rambler
5:18½	E. H. Hurlbut.....	Winton
5:21½	Col. Automobile Co.	Winton
5:22	MacNeil & Penrose.	Rochet Schneider
5:28½	E. R. Cumbee.....	Rambler
5:32½	G. E. Hannan.....	Olds
5:37½	G. E. Hannan.....	Olds
5:39½	H. C. Colburn.....	Winton
5:40	G. E. Turner.....	Olds

## GABRIEL IN PITTSBURG

The Famous Frenchman Formerly Lived and Married in the Smoky City.

Anotole Gabriel, who made the fastest time to Bordeaux in the interdicted Paris-Madrid race, formerly resided in Pittsburg. He went there some years ago and gave lessons in French and in fencing. He married one of his pupils, a Miss Stevenson, of Carnegie, whose wealthy parents disapproved of the match and practically disinherited her. She

### Binghamton Motorists Have a Day's Outing.



Binghamton, N. Y., arranged an automobile parade on May 10 that brought fifty vehicles, carrying nearly 200 persons, into

line. The picture shows the paraders halted before the camera on Riverside Drive. The committee of arrangements was composed

of D. Albert Smith, Clinton Collier, John Gale, Dr. Jack Killen, Louis Heller and J. M. Davidge.

based on an average speed of 14.047 miles an hour, had been worked out and had to be adhered to.

In the morning the conditions were ideal, so far as the weather was concerned. The sun shone brightly and there was just enough warmth in it to make it pleasant for the contestants. There was no dust and the road was in fine shape. At one point some vandals had broken a lot of insulators taken from telegraph poles and sprinkled the pieces in the sand. Their sharp, jagged edges reared up, a menace to the rubber tires of the cars, but all the drivers saw the glass in time to avoid it. All during the return trip, however, the wind blew fiercely,

5:42	Col. Motor Car Co.	White Touring
5:44½	J. S. Riche.....	Autocar
5:49	M. J. Patterson....	Locomobile
5:51	W. W. Price.....	Winton
5:52½	Col. Motor Car Co.	White Steamer
5:54	A. T. Wilson.....	Cadillac.

### Must Extinguish Fires.

An order has been issued by the various Delaware River ferry companies running from Philadelphia requiring the enforcement of the law requiring all fires and flames to be extinguished on automobiles offered for ferriage. Heretofore it has not been enforced. The United States inspectors of vessels had their attention called to the matter, and they took steps to have the change made.

died a few years later of consumption, and Gabriel then returned to France.

Pittsburgers who remember him describe Gabriel as a man of pleasing personality and many fine points. He is probably thirty-two years of age, above the medium height and very slightly built. He rapidly acquired American ways, and the English tongue came as naturally to him almost as if he were to the manner born. He was a member of the artillery service of the French army, had served his enlistment, and at the time he resided in Pittsburg was on the retired list and subject to service whenever his country had pressing need of her fighting men.

## BRITISH TRAFFIC CARS

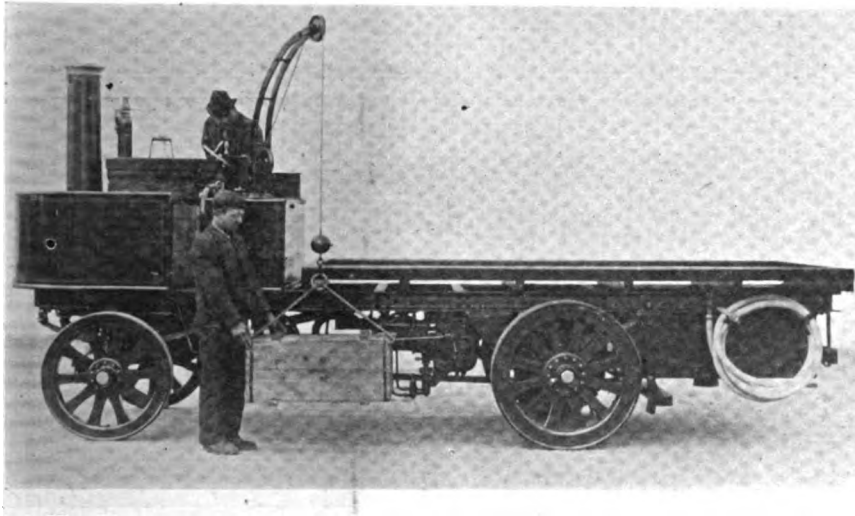
**Remarkable Growth of the Industry—Demand Exceeds the Supply—Thornycroft Company's Methods and Popular Types of Vehicles.**

London, May 30.—For a considerable number of years several English engineering firms have been engaged in the production of wagons and lorries for heavy traction purposes, and so far steam has been the most popular motive power where vehicles of this

time have often to be transported rapidly and for considerable distances.

A special feature of the trade in these vehicles is the large number employed by municipal authorities for the collecting of dust and for other purposes in which horse drawn carts have hitherto been employed. This, it is worthy of note, does not only apply to the metropolis and its outlying districts, but is becoming practically universal in all the large towns of England. In all these cases steam wagons are adopted, and, as they must be considered by far the more important class at the present time, I pro-

The Thornycroft works are worthy of some slight description, because it must be remembered that the growth of the firm dates only from 1896, or rather the following year, for it was not until the November following that the use of mechanically propelled vehicles was permitted on the roads of this country. There was a great opening for all classes of motor cars, and, so far as the lighter types were concerned, it was deplor-



LORRY, WITH CRANE.

nature are required. The movement, which began quietly, has of late advanced very rapidly, mainly due to the untiring efforts of the Liverpool Self-Propelled Traffic Association, who have conducted numerous trials with a view of giving manufacturers an opportunity of not only competing, but also of seeing what was wanted.

The result has been that during the last few years, the last three especially, there has been a rapid growth in the demand for steam lorries and wagons, a demand which

pose to deal with some of the leading makes.

Perhaps the most celebrated British firm is the Thornycroft Steam Wagon Co., Ltd., of Chiswick and Basingstoke. The cata-



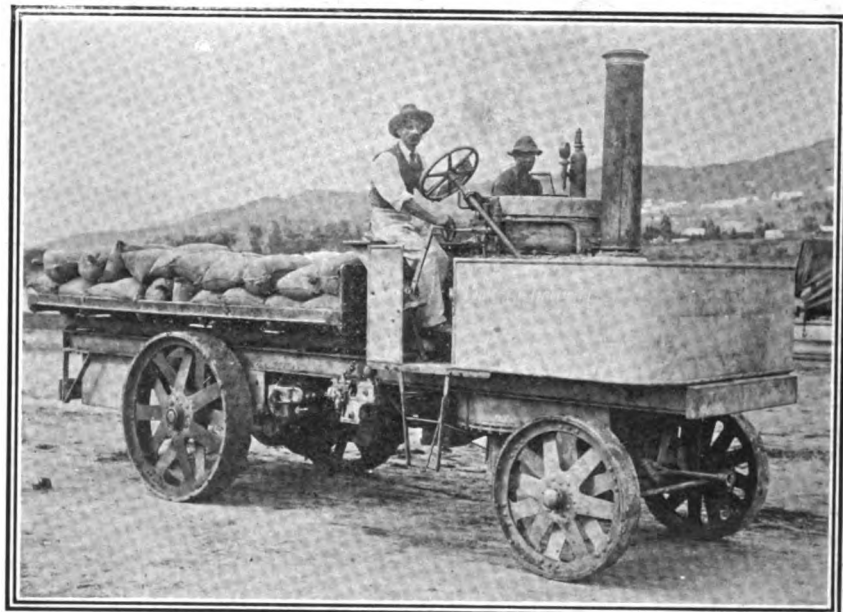
A PASSENGER VEHICLE.

able that the cycle trade did not rise to the occasion. As it was, many of the large cycle making concerns let the golden opportunity slip through their grasp, entirely owing to lack of enterprise, and also because they failed to grasp the great importance of the motor industry. At that time Mr. John I. Thornycroft (now Sir John), LL. D., F. R. S., M. I. C. E., possessed some torpedo boat works at Chiswick, and he was far seeing enough to at once conclude that there was a large trade coming in heavy motor vehicles. He started in a small way at some small premises close to his old factory. From the



LONDON STEAM OMNIBUS.

while at first most keenly felt in the North, has spread to London and the South, with the result that at the present time a very considerable number of vehicles of this type are in use all over England. In London they are commonly seen, being largely employed by brewers and paper manufacturers, whose goods are heavy and at the same

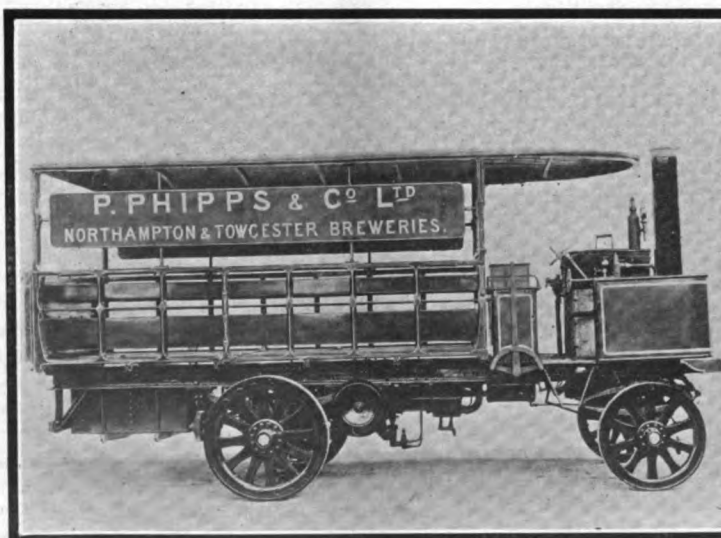
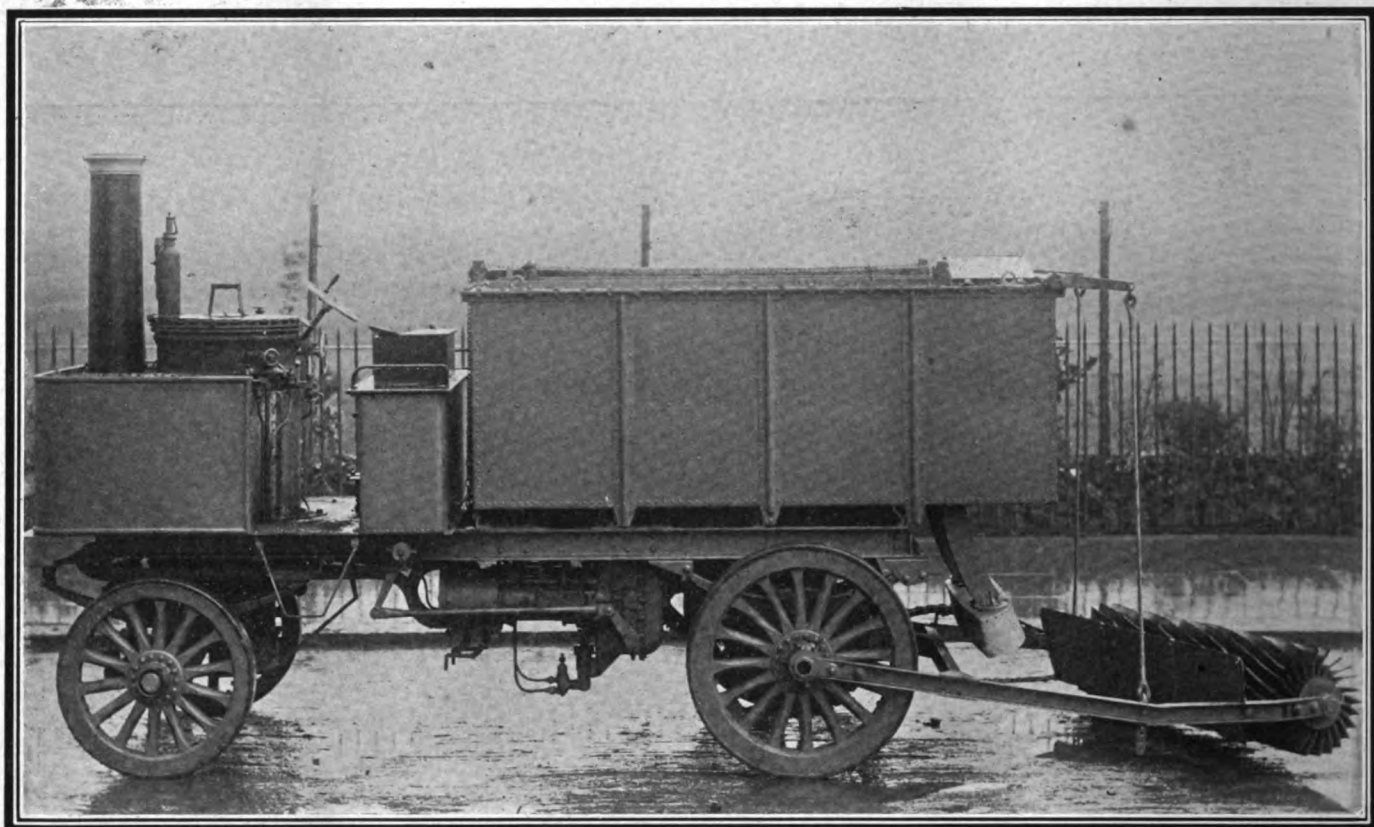
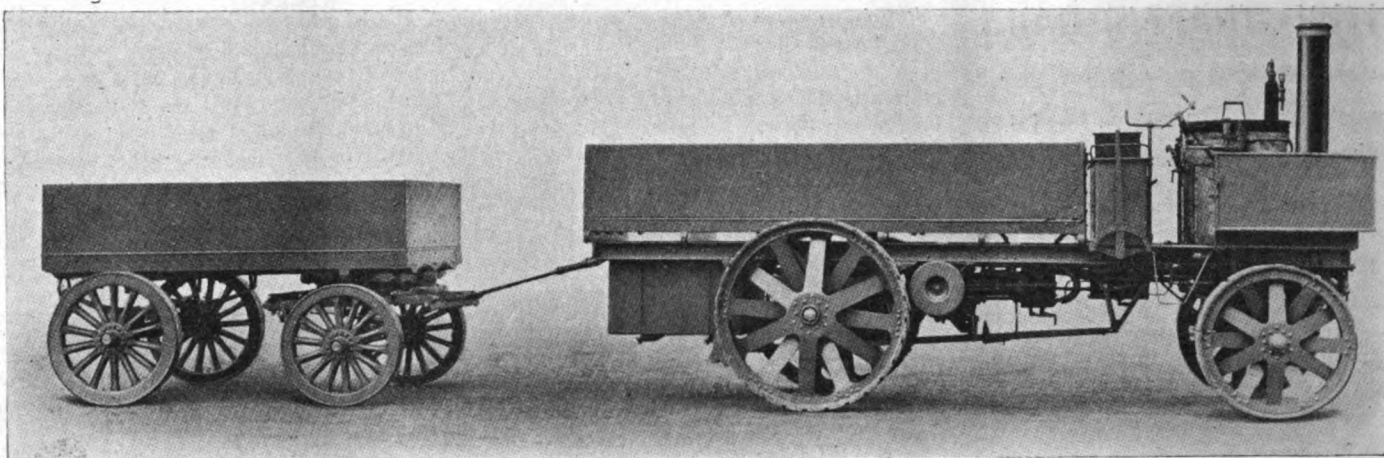


DESIGNED FOR THE COLONIES.

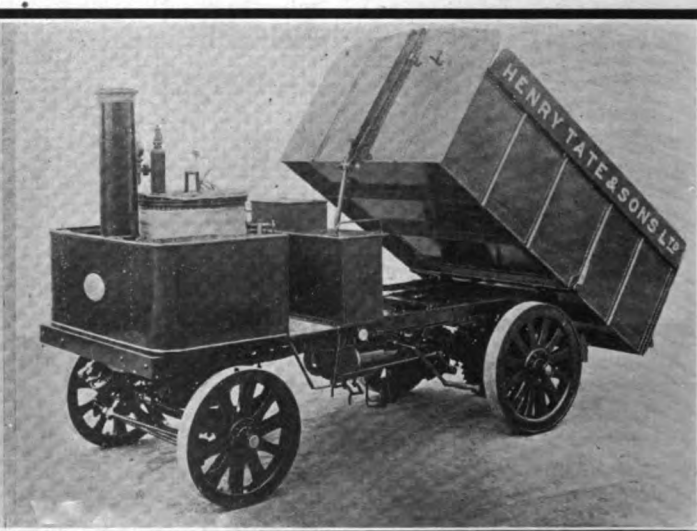
logue issued by this company is so large that it is published in six sections. It may be remarked that in all the patterns built by the firm the same types of engines and boilers are employed, so that when one description is given it must be understood to apply equally to all the patterns illustrated.

first the "Thornycroft" wagons were successful, and very soon it became necessary to remove to larger works at Chiswick, and shortly afterward to build a large factory at Basingstoke. It is worthy of note that both the factories are now unable to deal with the ever increasing demand.





LORRY AND TRAILER.



BREWER'S DRAY.

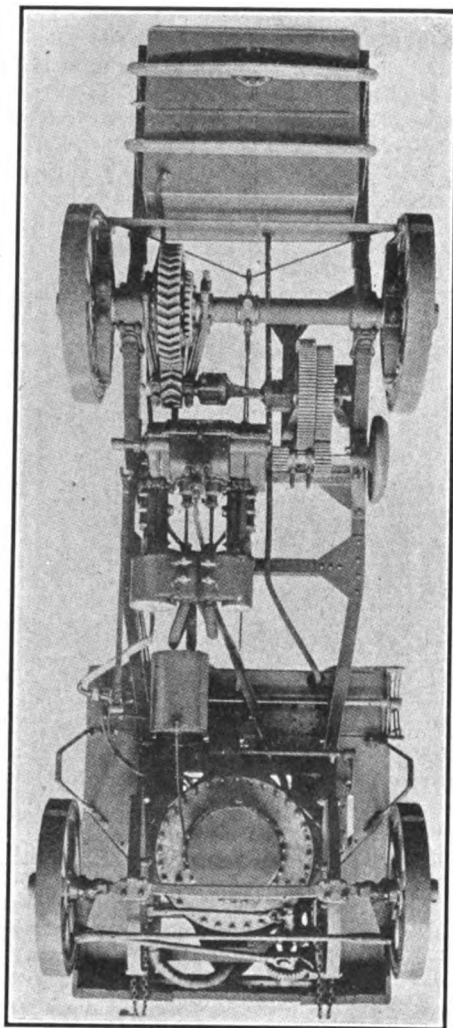
COAL "TIP" WAGON.



The features of the "Thornycroft" wagon will be easily seen on reference to the accompanying illustration, Fig. 1, which shows the chassis of the car. The view is taken from underneath. The engine is a compound horizontal type, with the usual reversing gear, and the cylinders are 4-inch and 7-inch, respectively, with 5-inch stroke. The valve gear is of special design, and permits of any degree of linking up. The transmission is very simple, a pinion on the engine shaft engaging with a spur wheel on the counter shaft. This shaft is constructed in three portions, the central part being connected with the end pieces by universal couplings, which are inclosed. By this means the vertical motion of the bearing springs is taken up, and the road wheels are driven steadily regardless of surface conditions and loading. One end of the counter shaft carries two change speed wheels, while the opposite extremity is provided with a double helical pinion, meshing with a steel spur wheel mounted on the differential gear, which is on the main axle. The end of the countershaft is supported in bearings which are held by a radius rod, so that they yield full play to the springs. The actual working parts of the engine are entirely inclosed, even the crossheads being in cast iron sleeves bolted to the cylinders. The main frame is constructed of channel steel, and the wheels are built with oak spokes and ash felloes. The steering is by means of a hand wheel actuating a worm gearing. The boiler is one of the central fired, water tube pattern, and uses coke or coal; it consists of two annular chambers connected by a series of 168 steel tubes  $\frac{3}{4}$ -inch in diameter. The heating surface is 77 square feet, and the working pressure 200 pounds to the square inch, but each boiler is officially tested to 350 pounds.

The various patterns of the "Thornycroft" wagons are too numerous to detail in full, or, indeed, to illustrate. The accompanying pictures will, however, give a good idea of some of the principal designs. One of the most typical is the brewers' dray (Fig. 2), and a considerable number of these are now in use in various parts of the world. Fig. 3 shows a type of tip wagon which is largely used for the conveyance of coal. Fig. 4 is a lorry fitted with a small crane, worked by steam, by which heavy cases can be lifted upon the truck with the greatest ease and rapidity. Fig. 5 is a wagon specially constructed for colonial work. It is a powerful car, and the machinery is completely protected. Municipal wagons of the type shown in Fig. 6 are in use in the majority of the large towns in England, and their employment has resulted in an immense saving in rates. The illustration depicts one of these wagons employed for road cleaning purposes, but when the squeegee is removed the tip portion can be employed for the collection of dust and for water for the roads in summer. The sprinkler from the tank is shown immediately behind the wagon and between the driving wheels and the sweeper. The Thornycroft company have also devoted a great deal

of attention to producing a really satisfactory passenger vehicle, and Fig. 7 shows one specially built for the Metropolitan Asylums Board. Fig. 8 is the first of a series of steam omnibuses now being built by the firm to the order of the London Road Car Co., Ltd., and is in daily use between Hammersmith and Oxford Circus. Fig. 9 shows the actual winner of the War Office prize, together with a trailer attachment capable of conveying about two tons in addition to the load carried on the wagon itself. It should be noted



THORNYCROFT CHASSIS

that the engines fitted develop 25 brake horsepower, and that by means of a spring drive the spokes of the wheels are relieved from an enormous amount of strain, while the wear upon the machinery is also reduced.

Before leaving the "Thornycroft" vehicles it may be interesting to give the form for estimating the cost of conveyance per ton, and the figures, which, after many experiments, have been proved to be the average. Of course, it naturally follows that a good deal will depend upon road conditions and the district where the wagon is employed. Assuming that the daily run is eighteen miles out and the same distance back, and further, that on the outward journey three and one-half tons be carried and on the return trip one and one-half tons of empties, it will be seen that this equals five tons

carried eighteen miles. The runs can be made five days a week, leaving the Saturday for small adjustments. This works out as  $5 \times 5 \times 18 = 450$  ton-miles a week. In a year it should be reckoned that two weeks will be taken in overhauling thoroughly, so that the weeks available will be fifty. Thus the calculation goes on:  $50 \times 450 = 22,500$  ton miles per annum, and the cost of carrying one ton one mile will, therefore, be  $\frac{£320}{22,500} = 3.41$  pence.

#### Where the Steel Wheel Scores.

The great vogue of the wood artillery wheel—which this year has almost reached the dimensions of a tidal wave—has had a tendency to cause both the advantages and the merits of the wire wheel to be lost sight of. Yet they are very real. Any repairer will vouch for the accuracy of this statement, both by reason of the difficulty experienced in repairing the wood type when it does go wrong, and the ease with which the wire wheel is put to rights.

This fact is brought out in a letter received by Fred Mott, of the Weston-Mott Co., from a customer who has used both kinds of wheels.

"The logic of your strong stand for wire wheels is being demonstrated now and then in my observation. When a wood wheel goes it is 'all in,' a wire wheel stands the racket and only goes a spoke at a time. You restrung these wheels for me last year, and they have been more than satisfactory, standing up under a load of four persons over rough roads."

#### A Catalogue That Tells Something.

With a wealth of descriptive and illustrative matter, in an attractive typographical setting, a new Stevens-Duryea publication sets forth the constructional details of that well known car. The text is purposely elementary—so couched that the operation of the car and its every detail will be clear to the novice who reads it carefully. The pamphlet is aptly styled an instruction book, and the method of operation is described, beginning with the turning of the crank to draw the air into the cylinder. A diagram of the wiring and of the clutches, two views of the motor and a plan view of the chassis are shown. Altogether the publication is a welcome addition to the ranks of catalogue literature.

#### All About G & J Tires.

G. & J. tires for automobiles, motorcycles and driving wagons form the subject of the latest pamphlet issued by the G. & J. Tire Co., Indianapolis, Ind. Attention is called to the fact that this is the original clincher tire, and that in its automobile form it has been on the market since 1895. A large quantity of information of value to tire users is found between the covers of the publication.

Mail between Denhoff and Bowden, N. D., will hereafter be carried in an automobile.

## BUFFALO REDIVIVUS

### Moribund Club is Reorganized and Starts out to Accomplish Some Things.

New blood was injected into the Buffalo Automobile Club, and that moribund organization promises to take on a new lease of life. The old officers resigned, and new ones were elected in their place, a number of new members were taken in and a plan of campaign was outlined.

All this took place at the Ellicott Club last week, where one hundred motorists sat down to a banquet. Clarence H. Bushnell acted as toastmaster, and after some quips had been made at the expense of a number of those present, and the Bailey bill had been torn to tatters, the important business of the evening was taken up.

After suggesting a reorganization Dr. Lee H. Smith went on to say that a few members of the old automobile club had done all the work, and that unless the new organization took hold it would be every man for himself, with the usual fate for the hindmost.

A general discussion then took place, and it was the general opinion that the initiation fee should be suspended and the yearly dues fixed at \$5. This was agreed to, and the election was proceeded with. It resulted as follows:

President, William H. Hotchkiss; vice-president, Augustus F. Knoll; treasurer, E. R. Thomas; secretary, Frederick Wagner; board of governors, Lee H. Smith, Bert L. Jones and Edward H. Butler.

"I will call a meeting of the board of governors within forty-eight hours," said Mr. Hotchkiss in accepting the presidency, "and we will see if some work cannot be done."

No time was lost by the new officers in getting to work. A meeting of the board of governors was held in the offices of President W. H. Hotchkiss, in the Morgan Building, the following day, and a good deal of business of importance was transacted. It was decided to redraft the constitution and bylaws of the old club for action by the board of governors and later by the club itself, and this work was intrusted to President Hotchkiss. It was decided to change the objects of the club so that manufacturers of automobiles, any owner and dealer in the machines, or any person interested in the sport of automobiling shall be eligible for membership.

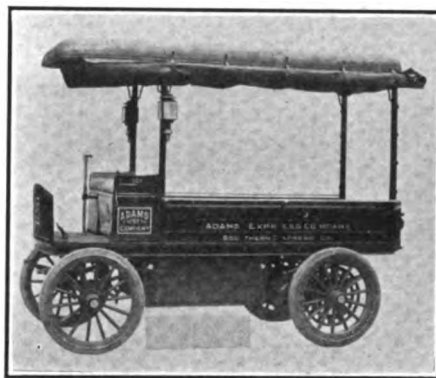
The governors also determined to recommend that the executive functions of the club should be in the hands of a number of committees, each committee to be composed of two governors and five named from the body of the club. This provides for a great degree of democracy in the management of the club's affairs.

"The principal committees," said President Hotchkiss, "will be those on membership, entertainments and runs, laws and ordi-

nances and, what will be most important of all, grievances. This latter committee will be for the purpose of hearing grievances of both kinds—those of the club members against the authorities, and grievances of outsiders against club members. The purpose of the club will be both to protect automobilists against oppression and to protect the public against automobilists who may be disposed to break the law."

### Big Business Vehicle Order.

About the biggest deal yet heard of in commercial motor vehicles, and one that is richly significant of whither affairs are trending, has just been put through by the Rainier Company of New York, selling agents for the Vehicle Equipment Co. The deal is with the Adams Express Company, for whom eighteen electric wagons have just been completed. The wagons were built to order, after some months of experimenting



with a demonstration wagon and also a steam wagon. Naturally, the Rainier concern considers this a distinct triumph for the electric form of vehicle that they build. Five of the eighteen wagons were in the Rainier garage at Broadway and Fiftieth street last Monday, and the rest were due to arrive from the factory in a few days. The whole eighteen are to be delivered the last of this week in a somewhat ostentatious fashion. The dozen and a half wagons will be run in a parade down Broadway to the offices of the express company and there formally turned over, every one ready to begin work.

The wagons are 7 feet long behind the seat by 3 feet 7 inches wide. They weigh 4,000 pounds, will haul 2,000 pounds and travel thirty-five miles on one charge. They are fitted with three speeds forward and one in reverse, the top speed being ten miles an hour.

The batteries consist of forty-four 11 M. V. Exide cells, and each has two G. E. 1004 motors. They are fitted with 3½-inch Turner solid tires, and the selling price was \$2,600 apiece.

### Russian Road Race Arranged.

Russia's old and new capitals—Moscow and St. Petersburg—are to be the scene of an automobile contest to be conducted this summer. The distance is 650 versts (400 miles), and seven control stations will be established. It is believed that a number of foreign sportsmen will take part.

## SMOKY CITY'S CLIMB

### Grade Ascending Contest for June 13 Arranged by Pittsburg's Motorists.

Pittsburg, Pa., is to have a hill climbing contest. The Automobile Club of Pittsburg has fixed upon Saturday, June 13, as a date for an event of this character, Highland Park being selected as offering many advantages. A long, winding hill has been chosen as the scene of the contest, and is about a mile long, but not very steep, the maximum gradient being only 7 per cent. The course is termed Serpentine Drive, starting at a point near the Zoo and running up the grade to the reservoir at the top of the hill. The course has been approved by E. M. Bigelow, Superintendent of Public Works, and police regulation and protection will be provided.

The exact conditions of the contest have not been decided upon, but there will be several classes, divided as to the weights of the machines and the character of the motive power.

Thomas Hartley is chairman of the committee having the contest in charge.

### M. J. Budlong Convicted and Fined.

The case against Milton J. Budlong, president of the Electric Vehicle Co. and of the National Association of Automobile Manufacturers, has gone against him. Mr. Budlong was charged with speeding his automobile beyond the legal limit in Manchester, near Hartford, Conn., having thereby caused the horse of Ralph Cone to run away. Justice Bowers, before whom the case was tried, convicted Mr. Budlong and imposed a fine of \$50 and costs on each charge. An appeal was taken by Mr. Budlong's counsel and bonds filed. It is expected that a civil action will be instituted by Mr. Cone.

### To Fight Missouri Law.

It is the purpose of the Automobile Club of St. Louis, Mo., to test the constitutionality of the new State law, which fixes the maximum speed of automobiles at nine miles an hour throughout the entire State. An endurance run is also being planned to take place in the fall.

The club elected the following officers: President, John S. Carter; secretary, E. H. Steadman, and treasurer, Clarkson Potter.

### Ardennes Circuit Called off.

The Circuit des Ardennes has been postponed on account of the untoward ending of the Paris-Madrid race. It was to have been the second annual event, and was planned on a much more ambitious scale than last year, when Charles Jarrott won it.

The first Peerless car has appeared in Portland, Me. C. A. Robinson purchased the car in Boston and drove it to Portland in one day.

# The Metropolitan Salesrooms and Garages—XIV

What was the first structure in New York City built, from the foundations up, especially for use as an automobile station is that constructed for the Rainier Company at 1627-29 Broadway, corner of Fiftieth street. This is one of the comparatively new firms of automobile dealers who have shot into prominence during the past year. The Rainier Company are best known as the selling agents for the Vehicle Equipment Co., they having probably introduced to commercial concerns more electric trucks and hauling

Nov. 1, 1901, to Nov. 1, 1902, the Rainier Company took orders for 157 vehicles, including hansom, victorias, broughams and many big trucks for breweries and other business concerns.

The big jump forward by the Rainier Company was made last fall, when it took the sole selling agency of the Vehicle Equipment Co., and began to introduce its trucks everywhere. This jump is indicated by the record of having sold from Nov. 1, 1902, to June 1, 1903, a total of 362 vehicles, of which 80 per

cent were of the heavy hauling order. Ordinarily the firm will take orders for delivery in sixty days, but at present it is booking orders only for deliveries five months hence.

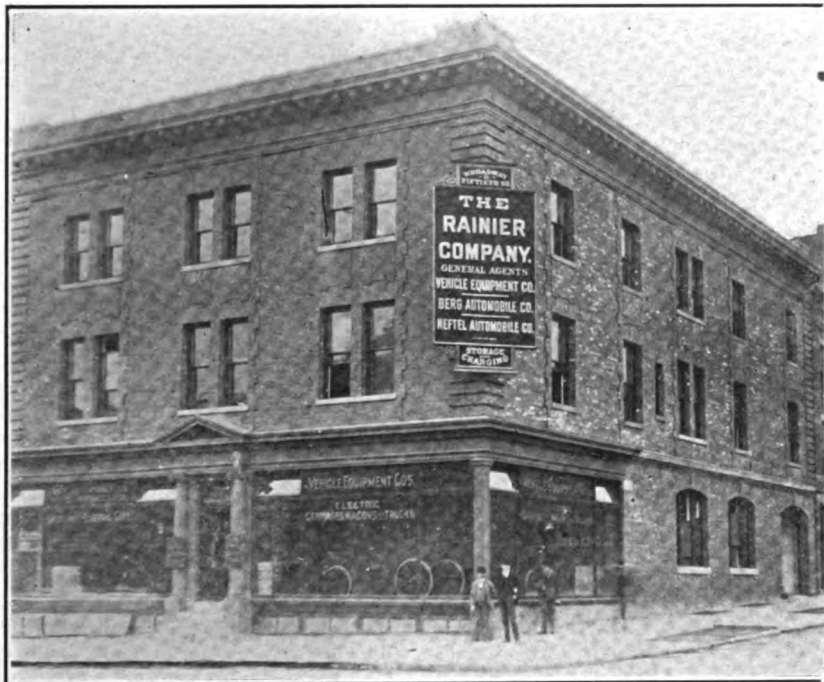
The biggest transaction of the firm and the biggest in the history of the trade in motor trucks has just been put through by the delivery to the Adams Express Co. of eighteen wagons for \$2,600 apiece, capable of hauling one ton. Among the firms equipped with draught vehicles through the agency of the Rainier Company are: National Biscuit Co., Tiffany & Co., Saks & Co., A B See Elevator Co., New York Telephone Co., George Elmer Brewery, Otto Huber Brewing Co., General Electric Co., Eaton, Cole & Burnham Co., New York Railway Time Table Co., Lang & Co., American Sight Seeing Co., Hall's Safe Co., Pennsylvania Railroad, Jacob Ruppert Brewery, Readlestone & Woerz, Hudson Coal Co., Pabst Brewing Co.

Some of the vehicles built to order and sold for use about New York have created decided sensations on their first appearance. Among such may be mentioned the safe trucks, equipped with electric windlasses for

holisting heavy safes to the tops of tall buildings; the telephone truck, fitted with power apparatus for hauling cables through the conduits; a truck built in representation of a trunk for a trunk manufacturer; a truck built in fac-simile of a Pullman car for the Time Table Co., and the observation coach, carrying forty, for the sight seeing concern. As the sole selling agents of the Vehicle Equipment Co. the Rainier Company has placed sub-agencies in Boston, Pittsburg, San Francisco, Denver, Chicago, Buffalo, Rochester, Washington and London, Eng. Since it took the agency of the Neftel combination cars recently the Rainier people have sold eleven vehicles, all of which will be delivered this month. They have also sold so many Berg cars that they are now away behind in deliveries.

Until recently this firm had its main offices at 393 Broadway, where its safe business was done. On July 1, last year, it opened a storage and charging station at Ninth avenue and Twenty-seventh street, taking the ground floor, which has a capacity for 125 cars. The business grew so rapidly in different directions, however, that it was found last winter that it would be necessary to have new separate quarters for its automobile business, and the building at Broadway and Fiftieth street was begun. This was moved into on the first of June and fitted out for offices, salesrooms and a storage station for light vehicles only, the station at Ninth avenue and Twenty-seventh street being retained for the heavy trucks. The new building has a frontage of 50 feet on Broadway and is 100 feet deep on Fiftieth street. It has three stories and a basement, with brick walls and "mill construction" floors. From Fiftieth street the entrance is made up a short flight of steps into a show room on the main floor that runs the width of the building and is 30 feet deep. Back of the show room is a storage and charging and washing room for gasoline and electric cars, which can be brought in under their own power through a big entrance on Fiftieth street. An elevator, 5x7, capable of lifting five tons, provides for carrying cars from the basement to the top floor whenever desirable. On the second floor in the front of the building, over the same space occupied below as a show room, are the offices of the company, substantially and handsomely appointed, but not showily. In the rear of the offices on the second floor is the chief charging room for electric broughams and other pleasure vehicles. The top floor is occupied as a repair shop and repository for the "dead storage" vehicles. The basement is used as a garage for gasoline cars.

The Rainier Company consists of John T. Rainier, president; H. V. Kibbe, vice-president, and P. N. Lineberger, secretary and treasurer. Messrs. Rainier and Lineberger represent particularly the aggressive and enterprising spirit of the firm in the automobile business and are chiefly responsible for the encroachment that has been made by the electric truck into the realm of the horse. Regarding the future, the firm is utterly sanguine of the ultimate triumph of the electric vehicle for hauling purposes.



vehicles than any other one firm. It was due to the activity of the Rainier Company that the electric truck and delivery wagon obtained the strong foothold in New York and other cities of the East that it now has. The firm has now broadened its field of activities, however, and is the agent for the Berg gasoline cars and the Neftel combination gasoline and electric vehicles, as well as the electrics of the Vehicle Equipment Co. In the history of the Rainier Company is found an epitome of the progress made by the commercial automobile during the last eighteen months.

It was the first of November, 1901, that the Rainier Company, selling agents for safes at 393 Broadway, began to deal in automobiles, after having become converted to the claims of the product of the Vehicle Equipment Co. At first it took the sales agency for New York, New Jersey and Pennsylvania. Within the first year it had taken so many orders that the Vehicle Equipment Co. had felt obliged three different times to enlarge its plant in Brooklyn. The Vehicle Equipment Co. builds its electric draught vehicles to order only, and from

cent were of the heavy hauling order. Ordinarily the firm will take orders for delivery in sixty days, but at present it is booking orders only for deliveries five months hence.

The biggest transaction of the firm and the biggest in the history of the trade in motor trucks has just been put through by the delivery to the Adams Express Co. of eighteen wagons for \$2,600 apiece, capable of hauling one ton. Among the firms equipped with draught vehicles through the agency of the Rainier Company are: National Biscuit Co., Tiffany & Co., Saks & Co., A B See Elevator Co., New York Telephone Co., George Elmer Brewery, Otto Huber Brewing Co., General Electric Co., Eaton, Cole & Burnham Co., New York Railway Time Table Co., Lang & Co., American Sight Seeing Co., Hall's Safe Co., Pennsylvania Railroad, Jacob Ruppert Brewery, Readlestone & Woerz, Hudson Coal Co., Pabst Brewing Co.

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### Steam Patents Involved.

A number of interesting facts relative to the manufacture of the early steam cars in Boston are brought out in a decision just handed down by the Commissioner of Patents at Washington. The validity of some of the well known Whitney patents is attacked by Henry Howard, who in 1890 contracted with Whitney for the building of a steam car for his (Howard's) own use. In the background are F. E. and F. O. Stanley, whose application for a patent on a "steam drying apparatus for motor vehicles" antedates both Howard and Whitney.

"This case comes up on appeals from the decision of the examiners in chief on the question of priority of invention," says Commissioner Allen in his decision. "Howard has appealed from the decision in favor of Whitney as to the first count, and Whitney has appealed from the decision in favor of Howard as to the second count.

"The issue is as follows:

"1. The combination with a boiler of a hood or casing above the same having an upper outlet and a downwardly extending flue, and an exhaust pipe extending into said flue.

"2. A boiler, a casing above the boiler to receive the products of combustion, a flue or stack extending downward from said casing and exhaust pipe to discharge the exhaust steam into the said flue or stack, so as to carry the products down and out of the lower end of the latter, and an air inlet opening, into which the air is drawn by the exhaust and out of which the products of combustion flow naturally when exhaust is not operating."

The Examiner of Interferences awarded priority of invention to Whitney as to both counts.

"This case presents the question of originality of invention. Whitney and Howard seem to have had their first dealings with each other in regard to motor carriages in August, 1897, and after that date and up to the time that these applications were filed they had many interviews in regard to this subject, and as the result of these conferences these applications were filed. Prior to this time Whitney had a machine shop in East Boston and had there built a motor carriage and had exhibited it at the Mechanics' Fair in Boston in February, 1897.

Howard was a chemical engineer and seems to have had no experience with motor carriages before meeting Whitney, but in August, 1897, after having borrowed and used Whitney's carriage, he employed Whitney to make for him a motor carriage like one which Whitney was then building for another party. In the contract for the building of this carriage, dated September 13, 1897, it was stipulated that the plans should be 'subject to any alterations and improvements which may hereafter be agreed upon between Mr. Howard and myself.'

The invention here in controversy, and particularly the second count, relates to means for rendering the exhaust steam from a motor vehicle invisible. Whitney admits that Howard was the inventor of certain specific mechanism for this purpose (Q. 89, Q. 161), and so does Upham (Q. 28), who was and is Whitney's financial backer and one of the officers of the company owning Whitney's inventions.

"Under this agreement the applications were to be made through Crosby & Gregory as attorneys, and the company was to bear the expense. Howard's application here involved was filed on June 21, 1899, through Crosby & Gregory, and it is admitted by Upham that he gave the instructions to the attorneys in regard to it and paid the expenses. Whitney's application was not filed until six months thereafter. Howard and Upham had gone to the attorneys in April, 1898, for the purpose of having an application filed covering the exhaust steam apparatus, but upon the advice of the attorneys postponed filing it until the device was tested. (Upham, Q. 31.)

"Upham gives no satisfactory explanation of his conduct, in view of his present claim that Whitney was the true inventor, but says:

"My recollection is that I was weak enough to permit Mr. Howard to make an application for a device which I knew was not his invention, thinking that it would come to the Whitney Motor Carriage Company in any event under our contract, and that Mr. Howard would feel injured if we did not permit him to make the application.

"The construction stated in Count 1 and

used by Whitney in his first carriage does not render the exhaust steam invisible, and was not used for that purpose. It merely facilitated starting the fire. Count 2, however, includes an opening at the top of the flue through which air is drawn by the exhaust steam. This was not present in Whitney's patented device or in his first carriage, for in those devices the upper opening was intended to be closed after steam was generated and an artificial draft was created.

"Whitney states that in using his carriage at the Mechanics' Fair in February, 1897, he lost the cap which he ordinarily used on the opening at the upper end of the flue, and ran his carriage without that cap. He got another cap the next day, and put it on, but claims that he understood and appreciated the effect of leaving the cap off. No one corroborates him as to this understanding, and the mere accidental omission of the cap for a short time cannot be held to show a reduction to practice of this invention, or even a conception. Upham states, in effect, that Whitney told him that he had lost the cap, but got a new one.

"There is much testimony in the case in regard to the invention of different specific devices for rendering the exhaust steam invisible, but there is remarkably little in regard to the broad idea of providing an opening at the upper end of the flue for the admission of air. Confusion is caused by the amount of testimony in regard to heating the air before it is admitted to the flue, and the witnesses all seem to think that this is one of the features of the invention in controversy.

"It is held that the testimony presented by Whitney does not overcome the presumption in favor of Howard raised by the surrounding circumstances, and that Howard is the true inventor of the second count.

"Howard has raised the question whether the record shows public use of the invention of Count 1 for more than two years before the filing date of Whitney's application. This is a matter which is not presented for consideration upon an appeal of this kind, but it may be said that the present record does not seem to warrant the conclusion contended for or a further consideration of the matter.

"The decision of the examiners in chief awarding priority to Whitney as to Count 1 and to Howard as to Count 2 is affirmed."



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## SCARRITT RHAPSODIZES

**Takes the Motor Car for his Theme, and Says it is Thrice Blessed.**

Winthrop E. Scarritt, acting president of the Automobile Club of America, is an entertaining writer on automobile subjects at times, and some clever notes of his were a part of the brightness of the programme got up for the automobile entertainment arranged by him for the benefit of the Methodist Church at East Orange on Decoration Day. They are well worth an increased circulation, and here they are:

"When I start out in an automobile I am always reminded of what James Russell Lowell said in the Bigelow papers about the involved and complicated German sentence. He said it was like an admiral starting for sea with sealed orders—he never knew what route he was going to take or where in thunder he was going to land.

"In this automobile game I have been on both sides of the counter; first, as a purchaser and user, and second, as a manufacturer. On the former phase of the case I can speak touchingly, because I have been so often 'touched.' It has been said that doctors bury their mistakes. I wish we manufacturers could bury some of ours, but, alas, our mistakes too often bury us, rather than we them. A wise man, and I think he must have been a manufacturer, once said: 'We live and learn, but by the time we have learned, it is too late to live.'

"In all seriousness I wish to propound the question: 'What does the modern self-propelled vehicle mean?' Is it simply the rich man's toy, a passing fancy, the plaything of to-day, to be discarded for a new one tomorrow, or is it a new and scientific factor in modern life, which is yet to play an important part in the work of the world?

"If the latter, let us undertake to analyze the logic of its demands and get at the fundamental reason for its existence.

"We have heard much in these days of the wonderful development in modes of transportation. It is said that modern civilization has captured and chained the very gods of the ancients. We proudly contrast the great ocean greyhound with Fulton's first steamboat plying the waters of the Hudson. We point out the advance from that first little dummy train which ran over light wooden rails to the thundering Lackawanna Limited, carrying scores and hundreds of human beings, comfortably, speedily and economically from ocean to lake. In all this we have done well—verily, we have harnessed the gods of the ancients to our chariot wheels and made them to do our bidding. So much for transporting human beings in mass, or in great numbers at one time, but how about transporting the single individual, the unit of society?

"Did it ever occur to you that since the

dawn of history until the birth of the automobile there has been absolutely no advance?

"Pharaoh's horses were just as noble, and his chariot finer than any we see to-day on Fifth avenue. The horse drawn carriage of the first Napoleon was just as gorgeous and efficient as are to be seen on the Champs de Elysee. The fact remains that eliminating the motor car, the individual is no better off and has no better or different means of travelling from one point to another than he had in the days of Christopher Columbus or George Washington. Therefore, the automobile means (and every one of its separate letters deserves to be written with a capital) that the gods of the ancients, steam and electricity, have at last been harnessed to our individual carriage, and that the individual is emancipated from his serfdom to the earth. His feet, no longer leaden, have become winged, and each one of us may become—if he has the price—a winged Mercury. We have in the automobile segregated a little part of the giant forces which move the masses of the world, and appropriated it to our individual use.

"This great fact finds its expression for the first time in the modern motor car.

"In short, modern science has hitherto captured a few of the big gods of the ancients and chained them to the big chariots of modern transportation. The little gods have been so vigilant, so spry and so elusive that not until recent years have they been captured for the service of individual man in transportation.

"Perhaps the term demons, or little devils, would fit the case better than gods, for certainly our motor cars often act as though they were possessed of seven devils.

"Now that we have for the first time in the world got our little god, or our little devil, hitched to our little chariots, what are we going to do with him? Naturally, the first thing is to understand the brute. The uninitiated public say, I would like an automobile if it were not so dangerous. But did you ever consider that in that very fact lies its potency for good?

"The power and potency of any agent for good, from a razor to a locomotive, is the exact measure of its power for evil under changed conditions.

"I do not believe that the craziest dreamer of us all has for the fraction of a single moment, in his wildest flight of imagination touched the fringe of the garment of what this great industry is yet to become to civilization.

"I believe that the motor car of the future will be the product of American genius, American brains and American skill; and that it will be standardized and because standardized and made in enormous quantities, it can be sold at a low price, and that it will become the ready, faithful and reliable servant of man in every land where civilization has a home or commerce a banner."

## SPRINGS THAT SQUEAK

**Friction Between the Plates the Cause—Grease Will Remedy the Trouble.**

Motorists are sometimes troubled by a peculiar squeaking noise, which occurs particularly when running over rough roads, and some difficulty in locating the point whence the noise emanates is experienced. After carefully going over the mechanism the squeaking still exists, and there is anxiety as to where it is and what it can be. As a matter of fact, it lies in the carriage springs, and is caused by the friction between the plates in the springs. The car body should be jacked up until the weight is taken off the springs, allowing them to open just the smallest amount possible. A good, stout screwdriver should be inserted between two of the leaves, and some good motor grease spread in by means of a thin table knife. The grease should be worked down as far as possible to the centre of the springs, but as it is at the ends of the leaves where most of the friction occurs one is able to apply the greatest amount of lubricant where it is most needed, and with the least amount of trouble, when the method described is adopted. It is possible to jack up the car high enough to cause the leaves of the spring to gape sufficiently to be able to introduce the grease without putting the wedge between the leaves, but this procedure is to be deprecated, as it puts a strain upon the springs in a direction which they are incapable of standing. Motor grease should always be used in preference to oils. If the thicker grease is not procurable, the thickest cylinder oil should be used.

## Horse Delivery System to go.

Hayden Brothers, one of Omaha's big department stores, advertise their horses and delivery wagons for sale, the combined result, it is said, of the teamsters' strike in that city and the desire to install a service of motor vehicles. When asked the reason, William Hayden of the concern said:

"It merely means that, for the time being, our city delivery will be suspended. Our teams and wagons have caused us considerable annoyance, and we have decided to do away with them. We may keep one or two teams, but the rest will be disposed of." He declined to say whether his firm would install automobiles.

## Enlightening the Newspaper Men.

To forcibly impress members of the city press with the poor condition of most country roads, and illustrate the necessity for their betterment, the Indianapolis Automobile Club members are making it a point to take at least two daily newspaper men with them on their bimonthly runs.



## BAY STATE BILL

### Is at Last Reported by Legislative Committee— Present Speeds are Retained.

After holding the matter under consideration for a number of weeks the sub-committee of the Ways and Means Committee of the Massachusetts House last week reported on the pending automobile measure. The sub-committee settles upon a compromise in the matter of speed—rejecting the eight and fifteen miles provided for in the Higginson measure, but denying the motorists' request for twelve and twenty miles. Instead a maximum of ten miles in the cities and towns and fifteen miles in the country, the present legal rates, are recommended. The sub-committee holds that this is a proper speed, fast enough under the present conditions. It also believes that the present law, having been put upon the statute books only last year, should have a fair and further trial, and should not be changed this year.

The Higginson bill provided that "each license shall be numbered and a record thereof kept for public inspection, and the number thereof placed upon the side or back of the said automobile in Roman characters not less than four inches in height." The sub-committee recommends that "Roman characters" be changed to read "Arabic numerals." It thinks that it will be much easier for an official to identify the number of a machine that is speeding by him if the sign reads 119, for instance, than if it reads cxix.

The sub-committee also recommends a provision that the license number be "plainly displayed." With the number merely placed "upon the side or back," as in the original bill, they think there would be nothing to prevent throwing a shawl, coat or other covering over the license number and so concealing it.

Some minor changes in registration and in regard to motor vehicles owned by people living outside the State are recommended.

The penalties are left by the sub-committee as in the Higginson bill, as follows:

"Any person violating any of the speed restrictions herein set forth shall be punished, for each offence by a fine not exceeding two hundred dollars or by imprisonment for a term not exceeding ten days, or by both such fine and imprisonment, and upon conviction of a second offence the said commission shall, upon production of a certificate from the clerk of the court in which said conviction is had or upon other satisfactory evidence, suspend the license of automobile, owner and operator, and upon conviction of a third offence shall revoke the licenses of automobile, owner and operator, and no new licenses shall be issued to any of them."

## Antiquity of the Odometer.

The odometer is of very ancient origin. That it was conceived before the Christian era is evident from the fact that one is described by Vitruvius in a part of his work "De Architectura." It has been in continued use, under intermittent improvements, from an early period, and it has played a part in civilization's advance. Many State and county maps now in use were prepared by odometer surveys.

Originally and for many centuries a crude, heavy, unsightly instrument that recorded merely the revolutions of a wheel or disk, the modern odometer is trim, light, symmetrical, and by an ingenious reduction of gears the miles and fractions are at once recorded. It is keeping well within bounds to say that the inventive and mechanical genius of the last twenty years has done more for the odometer than was accomplished during many preceding centuries, and this is due naturally to the incentive produced by the increased use of wagons, the perfection and universal use of the bicycle, and to the recent advent of the automobile. The odometer's early employment was chiefly that of surveying roads and land boundaries, but increased means of transportation has created a larger field until thousands are now annually made and find a ready market, and it is safe to predict that their production and sale for automobile use will increase in direct ratio to the increase in the production and sale of automobiles.

## Remedy for "Blowing Back."

"Blowing back" is chiefly caused by a sharp draught blowing through the firebox, extinguishing the flame and causing it to become ignited at the nipple of the Bunsen burner instead of at the usual burner holes; or it may be caused by a decrease of pressure in the fuel tank, so that the flame is allowed to fly back and ignite the nipple. The remedy in the first case is to protect the firebox from side draughts, but the bottom should be left open, so that the air necessary for complete combustion can reach the burner, and to fix a double ended chimney on to the uptake of the boiler. These are fitted to most of the latest pattern of steam cars, the end of the uptakes being formed in a number of patterns, the idea being to form a baffle plate to draughts, while at the same time they admit the hot air passing away from the boiler to the atmosphere.

## Replacing a Flawed Shaft.

A broken crank shaft is fortunately a rare occurrence, but even with the very best car engines, as with all other classes of engines, an internal flaw in the crank shaft is a possibility which engineers cannot guard against, and this, of course, will in time develop into a breakage. When such an accident occurs a new crank shaft should be put into the engine and no attempt made to repair so vital a part.

## TREATS ALL ALIKE

### Licenses and Numbers Required for All Vehicles Under New Louisville Ordinance.

It is at least an impartial brand of vehicle law that took effect in Louisville, Ky., on June 1. Under it every wheeled vehicle used on the city streets must be licensed and numbered, the amount of the fee and the size of the numbers varying according to the purpose for which they are used. Penalties for the non-observance of the law are imposed, and apply to the horse drawn kind equally with the mechanically propelled.

The principal provisions of the ordinance, which was passed more than a month ago, are as follows:

Section 1. That every vehicle run or used in the city of Louisville shall be subject to the following licenses, to be paid into the sinking fund of the city of Louisville for sinking fund purposes:

For each and every wagon, cart, dray, omnibus or other vehicle not specially designated herein, drawn by a single animal, the license shall be \$3 per year; drawn by two animals, \$6 per year; drawn by three animals, \$10 per year; drawn by four animals, \$15 per year; drawn by five animals, \$20 per year; drawn by six animals, \$25 per year. For each and every hearse the license shall be \$6 per year. For each and every hack, coupe, coach or like vehicle, the license shall be \$6 per year. For each and every buggy, sulky, gig, phaeton, pony cart or like vehicle the license shall be \$3 per year. For each and every family carriage, drawn by one animal, the license shall be \$3 per year; drawn by two animals, the license shall be \$5 per year. For each and every automobile the license shall be \$5 per year. Said license to be paid in advance.

Sec. 2. That there shall be provided by the sinking fund, without cost to the licensee, metal plates containing in raised figures the number of the license of each class and the year issued, together with the date of expiration. Said metal plates shall be placed and kept conspicuously in view on every vehicle mentioned in this ordinance, so that the same can be easily read from the sidewalk. Such numbers and letters upon said plates shall be in plain, distinct and legible figures and letters, each plate to be not less than one, two or three inches in width and placed on each vehicle.

Sec. 4. Any person, persons, firm or corporation violating any of the provisions of this ordinance, where a different fine has not been provided herein, shall be fined not less than five nor more than twenty-five dollars for each offence; each day the violation is continued, shall constitute a separate offence.



SURREY, 12 HORSE-POWER, \$1800 Front head-light extra..

# THE HAYNES-APPERSON

is the **ONLY** gasoline automobile that ran the contest from New York to Boston and back without repairs or adjustments of any kind.

*It is the only machine that has won EVERY Endurance Contest held in America and every contest or race ever entered.*

## 17 Records and Awards all earned by Stock Machines.

The machine **you** buy is the kind that makes this **Absolutely Unequaled Record**. Our catalogue gives the records complete. Send for it and ask for the "Little Book," too.

Inquirers are urged to visit our factory where every detail of Haynes-Apperson superiority can be seen and fully understood.

**HAYNES-APPERSON CO., Kokomo, Ind., U.S.A.** *The oldest makers of motor cars in America.* Branch Store, 1420 Michigan Ave., Chicago.

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## You Cannot Get More for Your Money

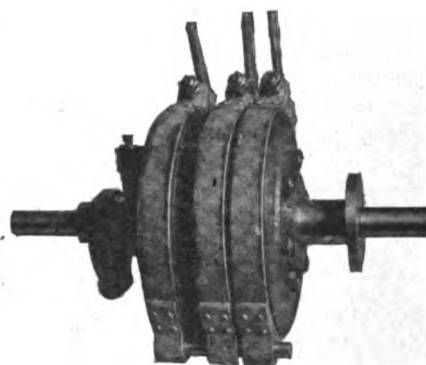
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A REMARKABLE DEVELOPMENT IN TRANSMISSION GEARS.

Does its work more simply, more easily and more effectively than any other gear.

THREE SPEEDS FORWARD, ONE REVERSE,  
OPERATED BY ONE LEVER.

MADE FOR BOTH CHAIN AND SHAFT DRIVE.

**R. W. COFFEE & SONS,**  
RICHMOND, VA.

### More Napier Cup Car Details.

According to the latest reports, the new Napier cars designed for use in the Bennett Cup race will develop close to 110 horsepower. Notwithstanding this, the system of propeller shaft propulsion is adhered to with the two cars, as with the three that have already been run in public. Of course, the extra size of the motors means extra weight, but in order that as much tractive force as possible shall be exerted by the drive upon the driving wheels, the engine is so set upon the chassis that its forepart is not advanced beyond the rear shackle of the front spring.

The bonnet measures no less than 4 feet 2 inches from the dashboard to the radiator. The wheelbase of these two cars is just over 9 feet, and the gauge the same as the smaller vehicles, viz., 4 feet 7 inches. Like them, too, the gear fitted gives three changes of speed, the ratio with the engine running at 1,200 revolutions being arranged to give, for the purposes of the Irish race, a top speed of eighty-five miles an hour; but for Continental work the gear would be proportioned to afford one hundred miles an hour, so long as the slip of the driving wheels is no more than at present. It is to attain this desideratum that the engine is placed so far back on the frame. The particular car which Edge will drive will be shod with 34 in. x 90 mm. non-slipping Dunlop tires.

### Look to the Bolts and Nuts.

It is a matter of very great importance to see that all nuts, bolts and working parts of the car are in perfect order, this being done at pretty frequent intervals. An experience which might under other circumstances have led to a serious accident shows the necessity of this.

In descending a hill at a moderate speed the driver was astonished to find the steering wheel come loose in his hands. Fortunately the wheel did not absolutely leave the steering column, and the driver immediately forced it back again into its place, while in the mean time he unclutched and applied the brakes. When the car was stopped and he came to look into matters it was found that the nut holding the steering

wheel to the column had not been screwed up sufficiently tight, and this becoming detached, a slight bump of the car had nearly thrown the wheel out of the steering connections. Had this happened with a reversible steering gear there is not the slightest doubt that a catastrophe would have resulted.

### For Luring Ground Hogs.

Still another use has been discovered for the automobile. An Illinois man uses his—when it is not churning butter, running small mills, etc.—for hunting ground hogs.

"Thinking it may interest you and might help you sell a few more machines in the country districts, I will give you the full details," he writes to the dealer from whom he purchased the car.

"We attach a long hose to the safety valve and run the machine about fifteen feet away from the nest; then we turn on full steam, and in a few moments the animals appear at the other end of the burrow, where my father is ready with the shotgun, and rarely fails to kill his game. You can use this letter any way you see fit, and if any of your friends visit Kaneville send them to me and I will scare out a few gophers for them. The other day I killed twenty ground hogs and six wolves."

### To Co-Operate in Buying Automobiles.

"Everybody his own automobile owner," is the purpose of the Co-operative Automobile Association of America, of Pittsburg, Pa., for which a charter will be asked of the Governor on June 23. The object of the company is to provide a fund by the subscription of its members to purchase automobiles on the co-operative plan. The applicants for the charter will be W. A. Donkin, L. C. Letzkus, J. E. Anderson, F. E. Jackson, G. C. Jackson, S. H. Patterson and others.

Motorists will do well to give Evanston, a Chicago suburb, a wide berth. The penalty for violation of the automobile ordinance has been increased to \$200. Formerly it was not less than \$5 nor more than \$25, but the Board of Aldermen made the change last week.

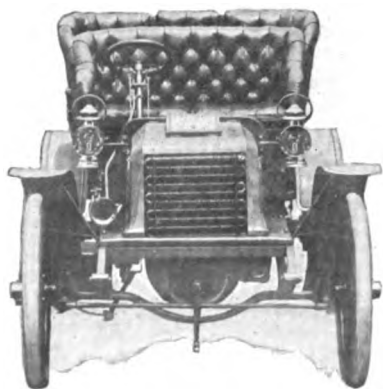
### Advance the Ignition Slowly.

Always advance the ignition very slowly, taking the lever along notch by notch, with several seconds interval between. This gives the engine every opportunity to pick up its speed gradually and without any shock to its component parts. Supposing the ignition to be half advanced and the engine running easily, if it be fully advanced suddenly there is every probability that the cylinder charge will be fired long before the piston has got anywhere near the top of its stroke. The consequence is that while the velocity of the flywheel is lifting the piston the early ignited charge tends to force it down, resulting in a very severe shock to the whole of the engine, the piston, connecting rod and crank shaft in particular. The noise arising from such a shock is known among automobilists as "knocking," and if this is allowed to continue the crank shaft is almost certain to break or the connecting rod to bend, causing the piston to bind and the engine to stop. Opening or closing the throttle valve suddenly does not produce the same effect as advancing the ignition; but if the quantity or quality of the charge be suddenly increased there will be, of course, a corresponding increase in power, which will result in a heavy thrust upon the bearings, etc., until the engine has picked up its speed. It is advisable, therefore, to regulate the throttle lever gently, also.

### Pabst's Far Reaching Experiment.

An experiment of no small interest and importance is about to be tried by the big Pabst Brewing Co., at Milwaukee, Wis. An automobile truck has been contracted for, and upon its arrival it will be put to work hauling beer between the brewery and the railroad stations. Should it prove successful, it is said that all the horse drawn vehicles of the concern that "made Milwaukee famous" will be disposed of, and mechanically propelled ones substituted. The change will involve an expenditure of close to \$1,000,000.

Champaign, Ill., has provided its Chief of Police with an automobile, to be used as a service wagon.

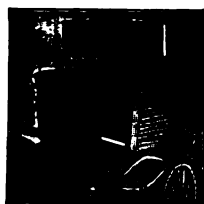


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"A QUALITY CAR."

\$2,500.00.

PREMIER MOTOR MFG. CO.,  
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### WHIPPLE ATTACHABLE Dos-a-Dos

Trap seat, complete attachments. Steam, \$30.00; all gasoline Runabouts \$25.00. Discount to Agents.

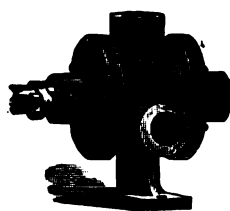
**R. W. WHIPPLE,**  
170 State St., Binghamton, N. Y.



### Metal Mud Guards, Bonnets, Tanks, Rotary Circulating Pumps Radiators, Mufflers.

The best on the market. Send for circulars and price list, stating quantity.

**THE RAY AUTOMATIC  
MACHINE CO.,**  
Water St. Cleveland, O.



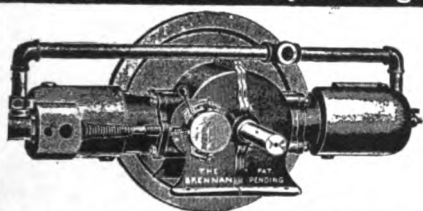
### Improve Your Circulation BY USING THE LOBEE PUMP

Increases and gives a positive circulation to the cooling water for all Gasoline Motors. Simple, Cheap, Durable, Efficient, easy to apply.

Sent on trial to responsible parties.

**Lobe Pump & Machinery Co.,** 120-136 Terrace, Buffalo, N. Y.

### WHAT'S THE USE of taking chances when you can get



### BRENNAN STANDARD MOTORS?

We make them in all sizes.

**BRENNAN MFG. CO.,** Syracuse, N. Y.

## FOR RENT.

## Desirable Site

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## Auto Station,

S. E. Cor. Jefferson Ave. and Ormond Place,

**BOROUGH OF BROOKLYN.**

(Two blocks from Bedford Avenue.)

Lot 75 x 130. Building 45 x 90.

Clear floor space 44 x 89.

**REALTY ASSOCIATES,**

179 Remsen Street,

**BROOKLYN.**

### Pump Faults and Their Remedy.

There is nothing more annoying or more difficult to deal with than a water circulating pump which persistently leaks. Such a pump is almost hopeless, as the defect can usually be traced to faulty designing, as the bearings are not long enough. When this is the case, the pump being rotated by chain or frictional contact with the flywheel of the engine, the driving pressure being applied at one point causes the pump spindle to bear against opposite ends of the bearing.

Now, the shorter the bearing is the greater the wear will be, and so soon as this reaches an appreciable amount a permanent leakage will set in. This can only be cured by re-bushing or lining the bearing, an expensive job, which would have to be repeated at very short intervals. The moral is, "If you have a bad pump get rid of it at once."

Instead of a long plain bearing, many pumps are fitted with a stuffing box and gland. Asbestos, tow or other material is packed into the stuffing box and the gland is tightened up to make a watertight joint around the revolving spindle. The stuffing box is a cylindrical chamber formed upon the body or cover of the pump. It is bored out considerably larger at its outer end than the diameter of the spindle, and is provided with an internal screw thread. The gland is simply a long sleeve fitting over the pump spindle. It is screwed to fit into the stuffing box, and is provided with a hexagonal head so that it may be tightened up with a wrench.

Even the best of pumps will leak in time through the bearing wearing. When this occurs the best packing to use is one composed of alternate rings of rubber and hard fibre, which should be a good fit over the spindle. If the pump runs at too high a speed for the rubber rings to stand up to, then alternate the fibre rings—which should be at least one-eighth of an inch thick—with asbestos cord.

### Britain's Specially Constructed Motordrome.

What promises to be the first specially constructed motordrome in the world, and which is understood to be fathered by the Automobile Club of Great Britain, has been surveyed at a point about twelve miles from London, on private ground. The total length of the course will be six and three-quarter miles. At one end will be a small circular loop, and at the other a larger pear-shaped loop. Shortly after leaving the small loop is a hill, on which it is intended to have hill climbing tests. It will be 666 yards long, and will have gradients varying from one in fifteen to one in seven.

Continuing from the hill a wide sweep is made into a straightaway, with a 300 yard start for the mile, at the end of which will be erected grandstands. By this arrangement the flying kilometer will have a longer start. From the mile finish line the course runs into the big loop, the sharpest curve of which will be to a radius of 274 yards. The width of the course will be fifty feet, except over the straightaway mile, where it will be widened to seventy feet.

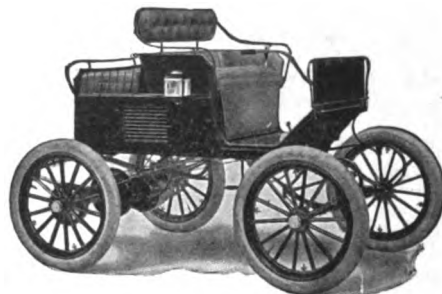
The outer half of the curves will be banked for high speed, and the inner half banked for medium speeds only. The whole of the site will be kept rigidly private, and will be inclosed by a fence.

# NATIONAL ELECTRICS



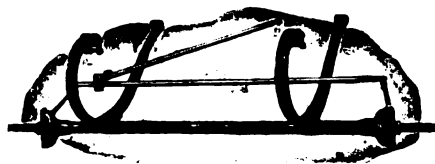
**Model 75. Price, \$1000.**

Choice of physicians and others wishing ease of entering and alighting.



**Model 110. Price, \$1250.**

This is our four-passenger vehicle. Practical for either two or four persons. Meets the demand for a convertible two or four passenger Auto.



**Front System.**

When you see these springs you know it's a National. Strength, comfort and beauty are combined in this part. Examine both front and rear systems of the National before you invest.

**GET OUR CATALOGUE.**

## National Motor Vehicle Co.

1400 East Twenty-second Street,

**INDIANAPOLIS, IND.**

## The Week's Patents.

728,543. Internal Combustion Engine. Robert D. Chandler, Fairhaven, N. J. Filed April 5, 1902. Serial No. 101,542. (No model.)

Claim.—1. An internal combustion engine, comprising a cylinder, a rotary piston mounted therein, an air compressor, walls forming a passage from the air compressor to the combustion chamber of the cylinder, an abutment mounted in the cylinder and movable toward and from the piston, a valve carried by the abutment and movable therewith to cut off the communication between the air compressor and the cylinder, means for periodically actuating the abutment, and means for supplying fuel to the air as it passes from the air compressor.

728,667. Storage Battery. John C. Brocksmith, Chicago, Ill. Filed Jan. 14, 1902. Serial No. 89,704. (No model.)

Claim.—1. A supporting and conducting grid for storage batteries comprising a rectangular metallic frame of T-shaped cross-section provided at its corners with bosses having holes therethrough, the vertical faces of said bosses being flush with the edges of the frame.

729,385. Vehicle Wheel. William Morrison, Chicago, Ill., assignor to the Hellos-Upton Company, Chicago, Ill., a corporation of New Jersey. Filed January 8, 1900. Serial No. 773. (No model.)

Claim.—1. In a vehicle wheel, an elastic tire consisting of an inner inflatable tube and an outer circumferentially rifted sheath having its margins turned at right angles to form a radial projection, in combination with a wheel having a rim curved to fit the body of the tire, provided with an annular groove having a solid base to receive the projection of the tire and divided into annular separable sections having meeting faces, which positively limit the approach of said sections, and fastening devices for uniting the sections, and thereby clamping the projection of the tire, substantially as described.

729,499. Igniter for Gas Engines. John MacHaffie, Schenectady, N. Y. Original application filed August 12, 1901. Serial No. 71,676. Divided and this application filed October 3, 1902. Serial No. 125,813. (No model.)

Claim.—1. In a gas engine, an electric igniter consisting of two terminals which rotate with respect to each other, each carrying a disk.

2. In a gas engine, an electric igniter consisting of two terminals each carrying a rotatable disk, and means for oscillating and reciprocating one of said terminals.

729,501. Variable Speed and Reversing Gear. Rodolphe Mathot, Brussels, Belgium. Original application filed March 26, 1902. Serial No. 100,100. Divided and this application filed June 16, 1902. Serial No. 112,002. (No model.)

Claim.—1. The combination to form a

variable speed reversing gear, of a motor shaft, a cone pulley connected thereto to turn therewith, a wheel upon the motor shaft, a clutch to operatively connect it with the pulley, a counter shaft, a loosely running reversely set cone pulley thereon, a loose wheel coaxial with and adjacent to the pulley, a spur gear fast with one of said two members, shafts equidistant from the axis of said pinion, carried by the other member, two sets of satellite pinions carried at the respective ends of said shafts, one set of which meshes with said spur pinion, a second spur pinion meshing with and driven by the second set, an epicyclic train closing a gap between two shaft sections, a connection between said latter spur wheel and said train, and a shiftable band frictionally connecting the two cone pulleys.

729,537. Piston Bearing Oiler. Herbert H. Buffum, Abington, Mass. Filed Nov. 7, 1902. Serial No. 130,420. (No model.)

Claim.—1. In a piston bearing oiler, the combination of a cylinder, a trunk-piston therein having a packed zone, a pitman, a journal and bearing connecting said piston and pitman and located opposite said packed zone, means to supply lubricant to the periphery of said piston, and a lubricating channel leading from a point on the piston periphery forward of said packed zone longitudinally of the piston to said journal and bearing.

729,538. Automobile Steering Apparatus. Herbert H. Buffum, Abington, Mass. Filed Jan. 2, 1903. Serial No. 137,421. (No model.)

Claim.—1. In a vehicle steering mechanism a fixed base, a shaft stationarily journaled thereon, steering devices operated by said shaft, a steersman's pillar, a bearing therefor pivoted to said base, and a coupling connecting said shaft and pillar and having provisions for permitting a swinging movement of said pillar and bearing.

729,550. Battery Jar. George H. Condict, New-York, N. Y., assignor, by mesne assignments, to Electric Vehicle Company, Jersey City, N. J., and New-York, N. Y., a corporation of New-Jersey. Filed Dec. 16, 1898. Serial No. 699,425. (No model.)

Claim.—1. A rectangular battery jar of uniform internal dimensions, constructed of insulating material and adapted to contain an electrolyte and unsealed, its upper portion being tapered upon the outside so as to reduce the thickness of, and separate the edges of said jar from an adjacent body or bodies to allow escaping liquid to recede therefrom.

729,579. Motor Vehicle. James D. Harp, Modesto, Cal. Filed July 5, 1902. Serial No. 114,495. (No model.)

Claim.—1. A motor vehicle comprising a revolvable axle, built up by a plurality of longitudinal parts connected together by complete universal joints, a globe spindle rigidly connected with one of said parts and partially incasing one of said universal joints, a wheel provided with a globe hub, said hub being rigidly secured upon another of said longitudinal parts and also jour-

nalled upon said globe spindle, a steering fork straddling said wheel and provided with separate bearings mounted respectively upon one of said longitudinal parts and upon said globe hub, and means controllable at will for turning said fork.

729,586. Road Vehicle. Ernest G. Hoffmann, West Hampstead, England. Original application filed July 9, 1901. Serial No. 67,585. Divided and this application filed March 14, 1903. Serial No. 147,705. (No model.)

Claim.—1. In a vehicle combination with a leading truck and means for steering and driving same, of a trailing truck and means carried by the vehicle body and operated by the movement of same for steering all the wheels of said truck.

729,652. Motor. Charles T. Osborne, New York, N. Y. Filed September 27, 1901. Serial No. 76,749. (No model.)

Claim.—1. In a motor, the combination of an explosive engine, an air compressor driven thereby and having normally idle valves and passages enabling said compressor to run as an engine, an air reservoir receiving air from said compressor, an air engine aiding said explosive engine and driven by compressed air from said reservoir, all connected directly to the same crankshaft, and a two way valve and its connections to said reservoir, substantially as and for the purpose specified.

729,662. Electric Ignition Generator. Benjamin P. Remy, Anderson, Ind., assignor to Remy Electric Company, Anderson, Ind., a Corporation of Indiana. Filed April 17, 1902. Serial No. 103,296. (No model.)

Claim.—1. The combination of a dynamo or magneto electric generator mounted slidably on parallel rails and a spring or springs adapted to adjust same with relation to a driving mechanism.

729,664. Electric Motor. Edgar G. Richards, Madison, Wis., assignor to the Northern Electrical Manufacturing Company, Madison, Wis., a corporation of Wisconsin. Filed June 30, 1897. Serial No. 642,904. (No model.)

Claim.—1. In a self-contained motor the combination of a base, having means for attaching it fixedly in position, with a metallic shell attached thereto, two end pieces removably attached to the shell and having each an armature shaft bearing in line with the axis of the shell and a lateral projection, bearings in said lateral projection, an armature within the shell, a supporting shaft therefor in the bearings, an exterior shaft supported in the bearings which project laterally from the end pieces, and driving connections associated together and attached respectively to the outer ends of said shafts, substantially as shown and described.

729,700. Gas Engine. Ralph P. Thompson and Emil Koeb, Springfield, Ohio. Filed November 8, 1901. Serial No. 81,642. (No model.)

# "Whitney" Chains

THE WHITNEY MFG. CO., Hartford, Conn.



Claim—1. In a gas engine, and in combination with the compression and explosion chamber thereof, an air forcing and supply pump, having an air escape in the wall of its cylinder at a predetermined distance forward or in advance of the limit of the inward movement or return stroke of its piston, said air escape opened and closed by the movements of the pump piston, and when opened and closed by the movements of the pump piston, and when opened furnishing a free escape and clearance of air in front of the piston and preventing back pressure on the piston, and when closed forming an air chamber in advance of and closed at one end by the piston, the chamber having communication with the compression and explosion chamber, and having a capacity for a sufficiency of air to clear the compression and explosion chamber of the engine of previously exploded charge and to furnish the air for the next succeeding explosive charge, substantially as described.

729,704. Wheel Tire. Andrew D. Van Ausdall, Oxford, Ohio. Filed February 18, 1903. Serial No. 143,937. (No model.)

Claim—1. In a wheel, the combination with a rim formed with recesses in its face, and respective T-head tire bolts, of a tubular metal tire formed with a convex face, and with a flat base which contains a longitudinal groove or seam for the insertion of the bolt heads there through.

729,737. Motor Vehicle. Patrick J. Collins, Scranton, Penn., assignor of one-half to Christopher G. Boland, Scranton, Penn. Filed May 20, 1902. Serial No. 108,218. (No model.)

Claim—1. In a motor vehicle the combination with the rear axle, the reach connected thereto and the forward axle centrally pivoted to the reach, of brace bars connecting the ends of the forward axle with the reach, each of said bars having a piston head at one end, pump cylinders within which said piston heads are arranged, and valve controlled passage ways leading from said cylinders.

729,827. Battery. David H. Wilson, Chicago, Ill. Filed April 30, 1902. Serial No. 105,282. (No model.)

Claim—1. An electrode for electric batteries, comprising two cups or receptacles integral with each other, and separated by a suitable space, said inner cup surrounded by a complete free space and making contact with the outer cup only at the bottom, both of said cups having a comparatively smooth unbroken surface, so that they hold the liquid of the battery.

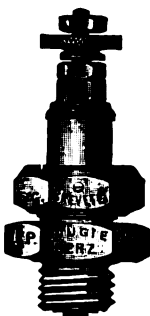
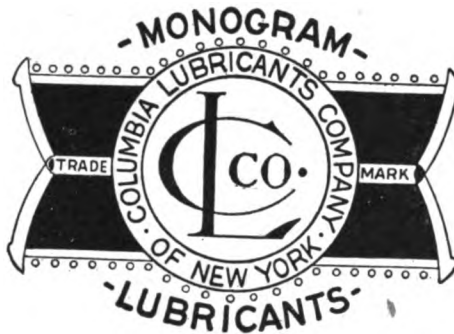
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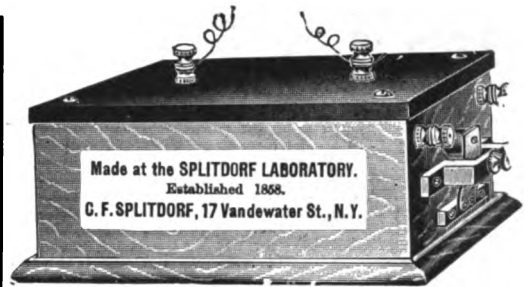
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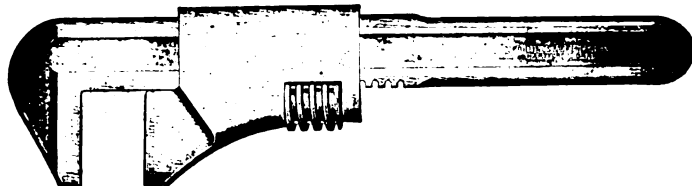


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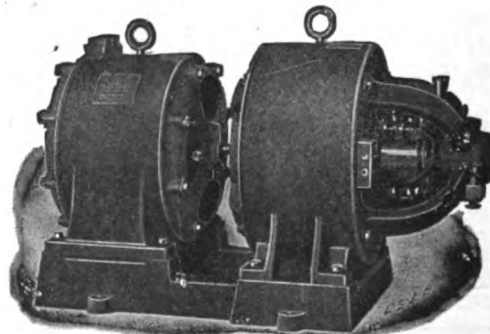
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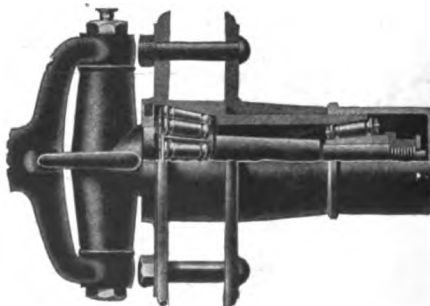
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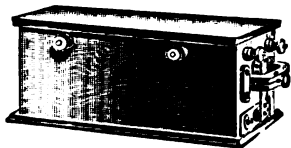
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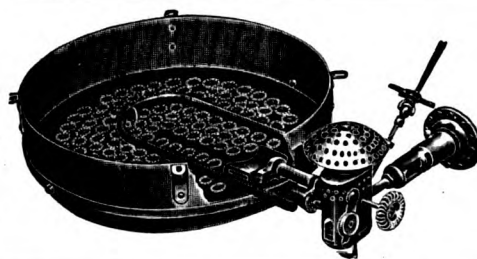
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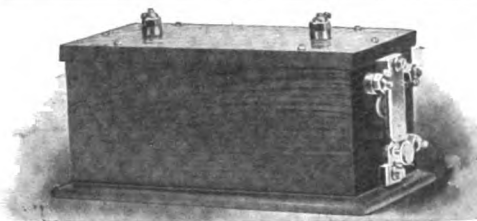


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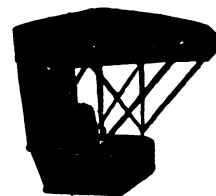
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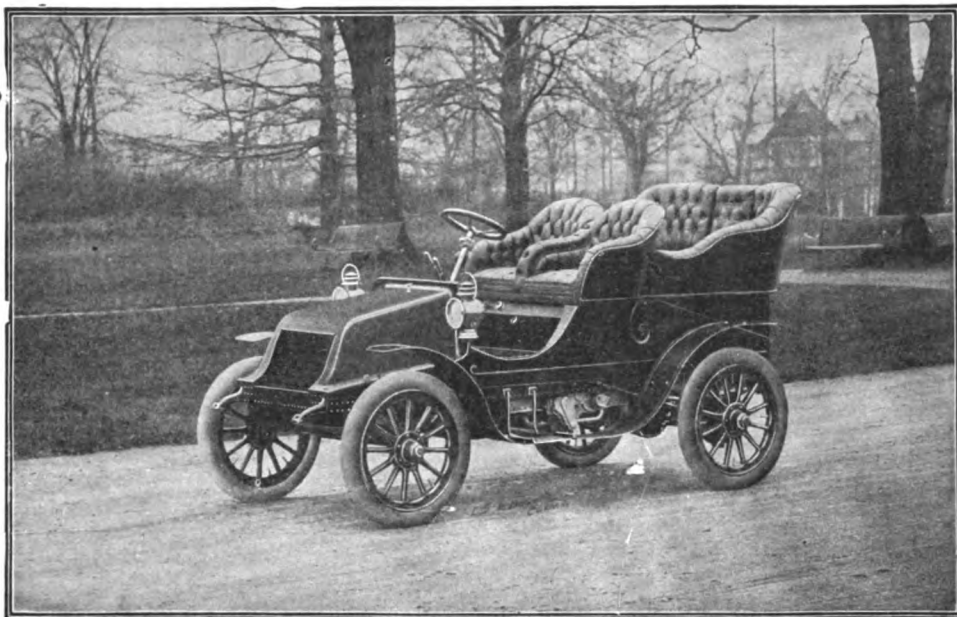


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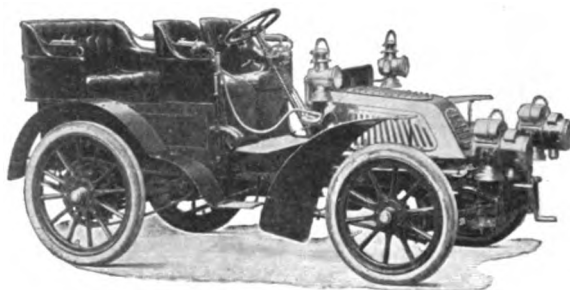


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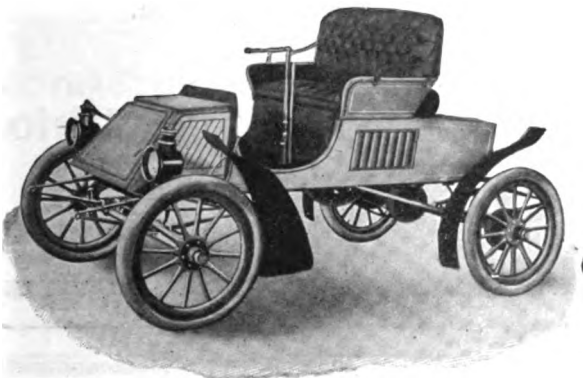
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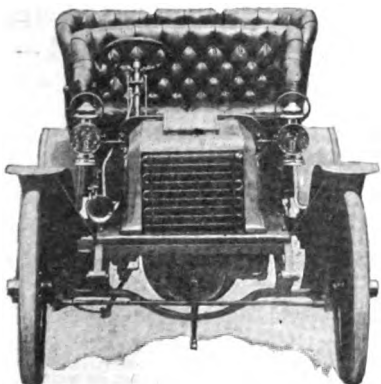


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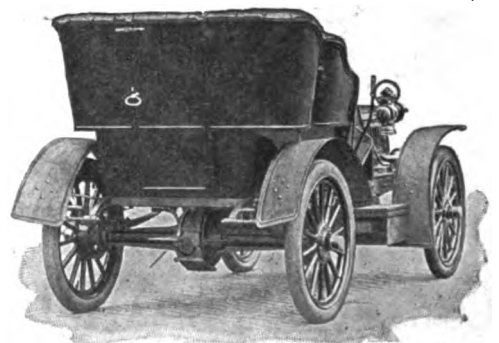
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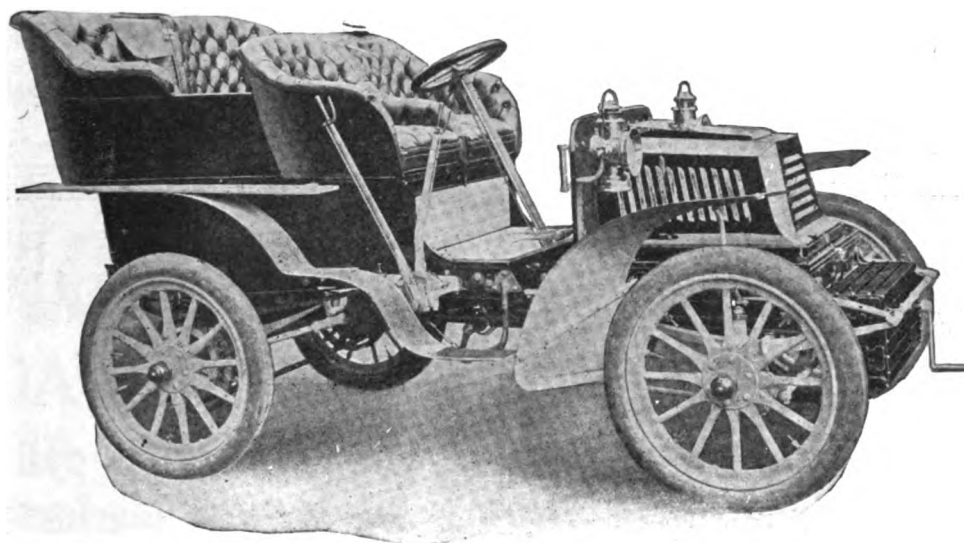
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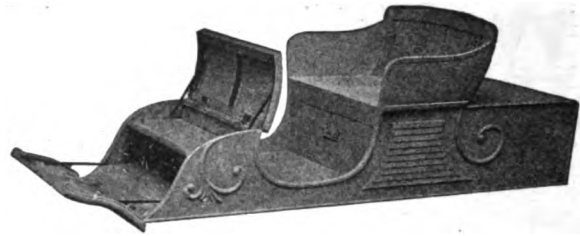
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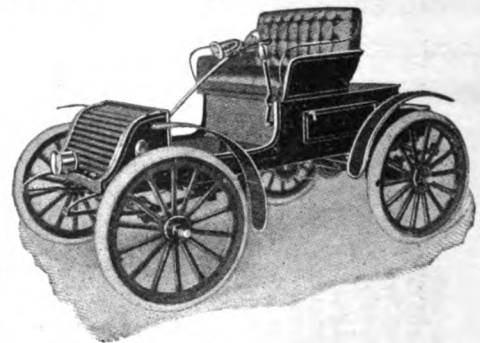
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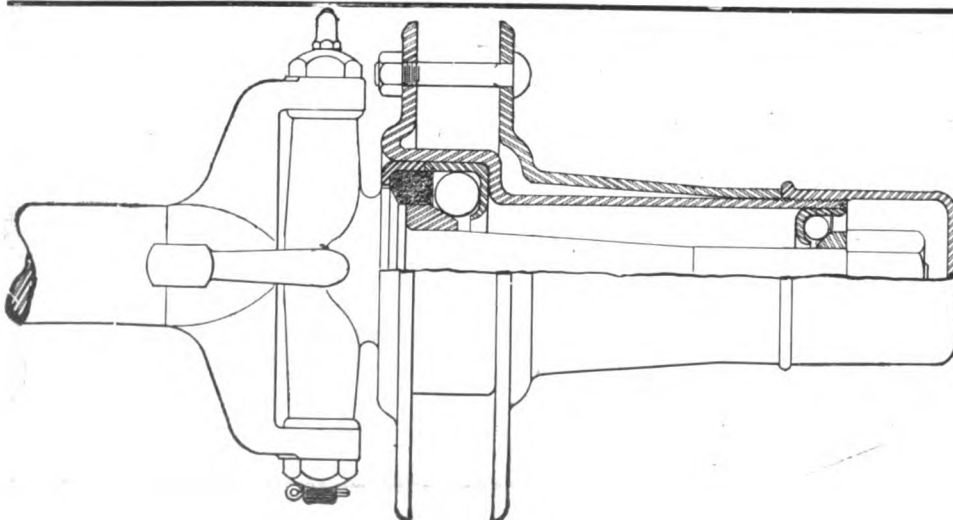


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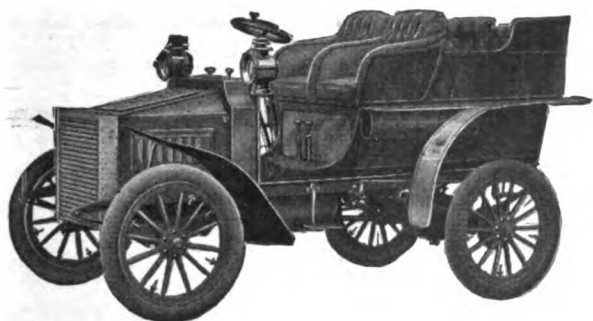
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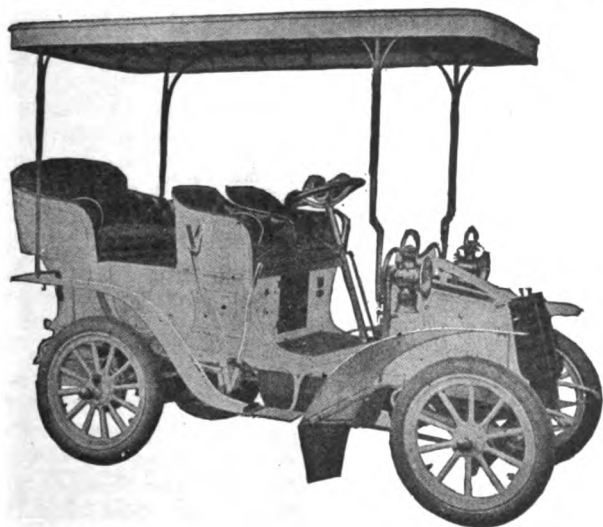
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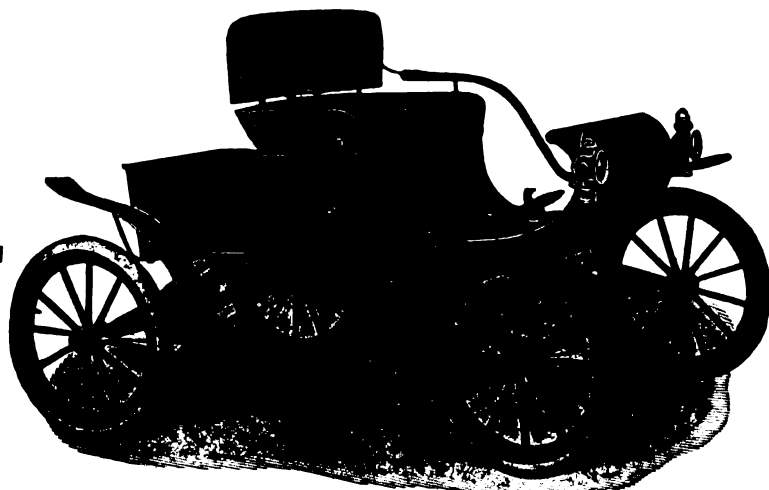
Automobile. This catalogue should be in the hands of everybody who is interested in automobiling. Will mail a copy upon request.

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COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, June 18, 1903.

No. 12

## FACTORY MEN MAY MEET

**Selden Association Suggests Convention at Niagara Falls—Objects to be Attained.**

The business heads of the various automobile companies having their organization and opportunities for getting acquainted and "reasoning together," the Association of Licensed Automobile Manufacturers now has in view the bringing together of the men who design and are actually responsible for the manufacture of the car—the engineers, superintendents and other factory heads.

A letter suggesting a meeting of the sort at Niagara Falls early in August is being circulated among members of the Selden association, and as several have expressed themselves as favorable to the idea there is every likelihood that the conference or convention will be brought about. The letter in question expresses the objects which it is hoped to serve in this language:

"It is thought that such a meeting of the practical men would result in marked economies in manufacture, eliminating much of the experimental work, which is no doubt being duplicated at a great expense by the members, and insure a more rapid development of the art; and, further, that the standardizing of certain parts can be brought about in this way that will materially reduce the manufacturing expenses of the members.

"It would be natural to expect that nearly all the companies represented would have one of their latest gasoline cars at the place of meeting. The formal meetings during the convention might be for only a short time each day, as probably the most telling results would come from the outside discussion of details."

## Another Company for Sandusky?

There is a probability of another automobile company being organized at Sandusky, Ohio, and beginning operations in a short time. Myron J. Caswell, who has been superintendent of the plant of the Sandusky Automobile Co., has tendered his resignation

and will sever all connection with that company. Caswell and Charles H. Ely, the well known Sandusky business man, are said to be planning the organization of a new company. The details of the plan have not yet been completed. Caswell when seen would not fully confirm the report. "It is a little premature," he said, "and nothing is now being done."

## Suit and Counter Suit.

The hearing in the case of James MacNaughton, of New York, against the Mobile Co. of America, before Charles H. Wright, as auditor, at Pittsfield, Mass., has been continued indefinitely. Arguments are yet to be made. The plaintiff brought suit some time ago against the company to recover \$2,000 alleged to be due him for services as their agent, while the defendants present an account in setoff amounting to about \$10,000. The last witness examined was John Brisbane Walker.

## Thomas Elected a Licensee.

The E. R. Thomas Motor Co., Buffalo, N. Y., has been elected a member of the Association of Licensed Automobile Manufacturers. Its Selden license will be issued as soon as the qualifications of membership are fulfilled.

## Fire Loss at Olean.

Fire caused the total destruction of the automobile and bicycle store of Close Bros., Olean, N. Y., last week. The loss is about \$4,000, of which one-half is covered by insurance.

## Bartholomew to Enlarge.

The Bartholomew Co., Peoria, Ill., is forced by increasing business to look for larger quarters. The concern makes automobiles, peanut roasters and waffle machines.

## Capital Enlarged Fourfold.

The Herman-Vaughn Automobile Mfg. Co., of Indianapolis, Ind., has filed notice that it has increased its capital stock from \$12,000 to \$50,000.

## Goes two Doors North.

The Chicago branch of the Electric Vehicle Co. is removing two doors north from its present quarters, No. 1,421 Michigan avenue.

## ACME SUCCEEDS REBER

**New Company, Strongly Financed, Formed at Reading—It Acquires Fine Plant.**

Within the week the Reber Mfg. Co., Reading, Pa., has passed out of existence, and the Acme Motor Car Co. taken its place. The latter has applied for a charter for a corporation with a capital of \$200,000, fully paid. In addition to succeed the Reber company, the new concern has acquired by purchase from the American Bicycle Co. the plant at Reading formerly operated by the Acme Mfg. Co., and will use it for the purpose of manufacturing automobiles in quantities.

Officers have been elected as follows: President, George D. Horst; treasurer and general manager, James C. Reber.

The Reber Mfg. Co. was formed about a year ago by the well known James C. Reber, and it has been manufacturing the Reber car. This is a two cylinder gasoline car, with a vertical engine in front, and supplied either with or without a tonneau body.

## To Sell Cadillacs in Europe.

Combining business with pleasure, William E. Metzger, sales manager of the Cadillac Automobile Co., will arrange for Continental agencies in London next month. He sails on Saturday of this week, and will be at the Hotel Russell, London, up to July 3. While there he will be glad to hear from those interested in the Cadillac line, and requests that he be addressed as above in advance. He will have with him in London a full line of Cadillac cars.

## Lewis Co. Opens Uptown.

A garage at No. 221 East Fifty-ninth street, New York, has been opened by The Lewis Automobile Company, which was incorporated a few weeks ago.

## Show out; Drisko Continues.

Drisko & Snow, No. 43 Columbus avenue, Boston, Mass., have dissolved partnership. The business will be continued by R. Drisko,



## INTENT OF THE BAILEY LAW

### Full Text of Justice Mayer's Decision in the Lippman Case Brings out Some Interesting Points.

To the ordinary lay mind the confusion created by the enactment of the Bailey law in New York State may not be wholly cleared by the interesting decision on the speed question which was obtained in the Lippman case from the Court of Special Sessions on Wednesday of last week. The decision declares that Section 666 of the Penal Code, as amended in 1902 by what is commonly known as the Cocks law, is not repealed by the Bailey law, but is modified by it. The section declares that the "Cocks law" is still in force, except as modified by the new law, which means that it takes the place of an ordinance and imposes a speed limit of eight miles an hour in New York and other cities, except as modified by the provisions for a minimum limit of fifteen miles an hour in the unbuilt portions where houses are 100 feet apart.

This is interesting, if sustained by the higher court, because it apparently makes the Cocks law still operative with regard to establishing a speed limit of eight miles an hour within the limits of towns and incorporated villages, until their compliance with the sign provision of the Bailey law makes operative its modification of the Cocks law in this respect and establishes the eight mile speed limit only within a radius of half a mile of a postoffice.

The new questions raised by the decision in this one case seem as puzzling as were those pondered over before it was rendered. One query it suggests is what law applies now to the communities that have not conformed with the provisions of the Bailey law.

One good point established is that the interpretation of the intent of the law is to be sensible and liberal. This is shown by the fact that although the houses at the spot where the defendant Lippman was arrested were not 100 feet apart the general character of the neighborhood was that of an "unbuilt" locality.

Another interesting point made in the decision is that the Highway law prohibiting a speed beyond what is reasonable and proper with due regard to the traffic and the life and limb of any other person gets an interpretation to the extent of declaring that fifteen miles an hour is reasonable and proper where houses are 100 feet apart.

Still another interesting fact brought out is that the provision of the Bailey law with respect to limiting speed to eight miles an hour within half a mile of any postoffice where signs are erected applies to any post-office or station of the Postoffice Department anywhere in New York City.

On the whole the decision is one of peculiar interest at this time, being the first one obtained since the enactment of the new

law. It was written by Justice Julius J. Mayer, Justices William E. Wyatt and Willard H. Olmstead concurring, and rendered in the case of the People of the State of New York against Gustave Lippman. Charles H. Studin, Deputy District Attorney, appeared for the People, and Clarence K. Maguire for Lippman.

The full text of the decision follows:

#### LIPPMAN CASE STATED.

The complainant, a police officer, charged that the defendant on the 17th day of May, 1903, at the city of New York, in the county of New York, did operate, drive and cause to be propelled a motor vehicle, in and on Webster ave. and 189th street, in said city, at 2:55 p. m. of said day, at a greater rate of speed than eight miles an hour, to wit: at the rate of fifteen miles an hour; and that to operate and drive a motor vehicle at a speed greater than eight miles an hour was not permitted by any ordinance of the city of New York. The affiant by reason of the foregoing facts charged the defendant with having violated Chapter 266 of the Laws of 1902.

At the conclusion of the People's case the defendant moved to dismiss upon the ground that the facts failed to constitute a crime.

The police officer testified that he had marked off 264 feet on 189th street, had timed the defendant while he travelled said distance in a motorcycle, and that the defendant had gone the said distance in twelve seconds, which was at the rate of fifteen miles an hour.

It further appearing that some of the houses on 189th street and Webster avenue were far apart, being at a distance of more than one hundred feet from each other, while others were close together, and that in the particular space above referred to there were some houses close together and less than one hundred feet apart. Our determination of the defendant's motion to dismiss involves a construction of existing law in relation to the speed at which vehicles of this character may be operated on the public highways in the city.

#### HIGHWAY LAW OF 1901.

Section 163 of Chapter 531 of the Laws of 1901 provided, among other things, as follows:

"No ordinance, rule or regulation adopted by the authorities of any municipality in pursuance of this section or of any other law shall require an automobile or motor vehicle to travel at a slower rate of speed than eight miles per hour within any city, town or village of the State in the built up portions thereof, nor at a slower speed than fifteen miles per hour where the same are not built up."

By virtue of Chapter 266 of the Laws of 1902 (which became a law on March 27, 1902), Section 666 of the Penal Code was amended so as to provide, among other things, that a person who drives or operates an automobile, or motor vehicle, upon any public highway within any city at a

greater rate of speed than eight miles an hour is guilty of a misdemeanor, except where a greater rate of speed is permitted by the ordinance of a city.

The city of New York has not enacted any ordinance permitting a greater rate of speed than eight miles an hour.

So that the law up to May 15 of this year was that a person propelling or driving a vehicle of the character above referred to at a greater rate of speed than eight miles an hour anywhere within the limits of the city of New York was guilty of a misdemeanor.

On May 15, 1903, Chapter 625 of the Laws of 1903 became a law. This chapter is entitled "An act to amend the Highway law, relative to the use of automobiles or motor vehicles on the public highways," and, among other sections, Section 163 of the Highway law was amended so as to provide as follows:

"No ordinance, rule or regulation adopted by the authorities of any city, in pursuance of this section, or of any other law, shall require an automobile or motor vehicle to travel at a slower rate than eight miles per hour within the closely built up portions of such city, nor at a slower rate of speed than fifteen miles per hour where the houses in such city upon any highway are more than one hundred feet apart."

#### BAILEY LAW MORE DEFINITE.

This amendment in effect reinstates in this regard the provisions of Section 163 of the Highway law, as that law was in force prior to the enactment of Chapter 266 of the Laws of 1902, which amended Section 666 of the Penal Code. Under the 1903 law the phraseology is in some respects more definite than that theretofore used in Section 163. Thus the municipal authorities cannot adopt an ordinance requiring these vehicles to travel at a slower rate than eight miles per hour within the "closely built up portions" of the city, whereas in Section 163, prior to its amendment by Section 625 of the Laws of 1903, this requirement related to the "built up portions" of the city.

Thus, also, under the law of 1903, no ordinance may be adopted requiring these vehicles to travel at a slower rate of speed than fifteen miles an hour "where the houses in such city, upon any highway, are more than one hundred feet apart"; whereas in the law heretofore the limitation as to fifteen miles per hour was where the cities were not "built up."

#### GENERAL PURPOSE OF THE LAW.

The clear purpose of Chapter 625 was to provide a general scheme throughout the State for regulating the speed of automobiles and motor vehicles, and to that end to prescribe certain limitations upon the ordinance making power of the various local authorities through the State, while leaving to those authorities, except in certain few particulars, the details of speed regulations.

The legislative intent was to provide safe-

(Continued on page 450.)

## WHEELS WITHIN WHEELS

**Change Comes Over the Spirit and Name of the Concern and Stock is Offered.**

The Wheel Within Wheel Co., which made its appearance in the fall of 1901, has changed its name, or been absorbed by the newly organized Conestoga Automobile & Wheel Co., and more activity and enterprise are promised soon in the making and marketing of this particular form of vibration absorbing and puncture proof wheel for motor cars and other vehicles.

On the first day of the week certain financial papers blossomed out with a big quarter page advertisement offering for sale shares of stock in the Conestoga Automobile & Wheel Co. of Lancaster, Pa. The names of the officers and directors, as given in the advertisement, were headed by that of Colonel George Pope, who was president of the Wheel Within Wheel Co., the offices of which were in the Park Row Building, New York. The accompanying cut of a wheel was unmistakably that of the Wheel Within Wheel also. This was the first intimation of the purpose of the new Conestoga Co., the formation of which was noted in the Motor World last week.

When asked about the matter Colonel Pope said that the advertising was being done by persons in Lancaster who held stock, and not by the company, and that the first he knew of it was when he saw the advertisement. He was disinclined to discuss the affairs of the company, saying that there would be news later on, but said that the name of the Wheel Within Wheel Co. had been changed, as stated, and admitted being still the president. When asked if the company was to have a factory at Lancaster, Pa., he said there had been talk of this, but that the plans were not yet ready to be given out. Asked if the company would make automobiles, he replied that he thought not, the company being incorporated that way so that it might make motor vehicles if it chose to do so later.

According to the stock offering advertisements, the Conestoga Automobile & Wheel Co. is capitalized at \$500,000, the capital stock being in \$10 shares, offered for sale at \$9.

### Court Upholds Commissioner.

The Court of Appeals of the District of Columbia has rendered a decision fully affirming and upholding the Commissioner of Patents in finding for Howard in the interference case of Whitney vs. Howard. The case was set forth in full in last week's Motor World, and relates to patents on steam vehicles. Two counts were at issue, they being as follows:

1. The combination with a boiler of a hood or casing above the same having an upper outlet and a downwardly extending flue, and an exhaust pipe extending into said flue.
2. A boiler, a casing above the boiler to

receive the products of combustion, a flue or stack extending downward from said casing and exhaust pipe to discharge the exhaust steam into the said flue or stack so as to carry the products down and out of the lower end of the latter, and an air inlet opening, into which the air is drawn by the exhaust and out of which the products of combustion flow naturally when exhaust is not operating.

The first count is decided in favor of Whitney, acting for the Whitney Motor Wagon Co., and the second in favor of Howard.

### The Week's Incorporations.

New Britain, Conn.—The Corbin Motor Vehicle Co., under Connecticut laws, with \$200,000 capital; to manufacture automobiles.

Lansing, Mich.—Bates Automobile Co., under Michigan laws, with \$60,000 capital; to manufacture automobiles. Corporators—M. F. Bates, Bliss Stebbins and J. P. Edmonds.

Rutherford, N. J.—Loomis Automobile Car Co., under New Jersey laws, with \$20,000 capital. Corporators—Peter T. Davis, Addison Ely, Gilbert J. Loomis and Samuel Squire.

Buffalo, N. Y.—Globe Power Co., under New York laws, with \$200,000 capital; to manufacture automobiles. Corporators—William F. Hoffman, Elmer E. Hoover and George H. Hoover.

New York, N. Y.—Oldsmobile Co., under New York laws, with \$10,000 capital; to manufacture automobiles. Corporators—William T. Rainey, Cleveland, O.; Roy A. Rainey, Lakewood, N. J., and Raymond M. Owen, New York City.

Grafton, W. Va.—The Grafton Auto & Traction Co., with \$10,000 capital, to operate an automobile machine car or carriage for a general passenger, freight or train business; to own or lease grounds for parks and to maintain same; to furnish electricity for light and heat for public or private business. Corporators—A. J. Wilkinson, G. L. Jolliffe, O. M. Augir, H. P. Phillips, L. J. Mason and others, of Grafton, W. Va.

### Metzger Takes a Partner.

William E. Metzger, the well known sales manager of the Cadillac Automobile Co., has taken a partner. The happy event took place on June 10 at Detroit, when Miss Grace Marie Kimball became Mrs. Metzger. After the wedding Mr. and Mrs. Metzger took a trip on the lakes, and on Saturday of this week they sail for Europe.

### Dyke in New Quarters.

A. L. Dyke Automobile Supply Co., No. 1,402 Pine street, St. Louis, Mo., have removed to No. 2,108 Olive street. The change was made necessary owing to its increasing business, and the new quarters are both larger and better located than the old ones.

### Hastings Offers a Bonus.

A bonus of \$2,000 is offered the Berwick Auto Car Co. by the town of Hastings, Mich., if it will locate there. It is stipulated that the company shall invest \$25,000 and agree to employ twenty-five men the year around.

## TWICE AS MANY RAMBLERS

**Will be put out Next Year From Enlarged Factory**

**—Sales Manager Bennett Talks.**

George W. Bennett, sales manager for Thomas B. Jeffery & Co., makers of the Rambler cars at Kenosha, Wis., was in New York the first part of this week, while making one of his periodical trips around to the different Rambler agencies. He was going from New York to Boston, then to Washington, Philadelphia, Pittsburg, Cleveland, Indianapolis and Chicago. While calling at the Motor World offices Mr. Bennett casually revealed something of the progress being made by the Rambler makers.

A new tract of land of twenty-six acres adjoining the present factory in Kenosha has been recently purchased, and new buildings were begun on it on Monday. The new building will be 250 feet square, and will give the plant double the capacity that it has at present. When the addition is completed a track either a half or a third of a mile in circuit will be laid around the factory for testing purposes. Artificial grades and bridges also will be built on the grounds to test the power of the cars in hill climbing.

The Rambler factory is still behind in its deliveries, but is catching up steadily. While talking about sales Mr. Bennett said that it was astonishing how the small cities and towns were taking to automobiles. He remarked that sales were good in the Dakotas all through the winter, the people there managing to use motor cars much of the time in spite of the snow. The Rambler agents in the Dakotas would, said Mr. Bennett, have bought the whole output of the factory if allowed to do so.

Work has been begun on the 1904 Rambler models, and there will be a number of interesting changes in them.

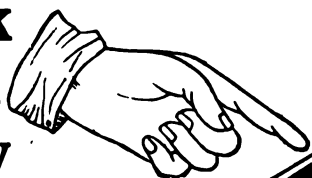
Before the time arrives to commence shipment of next year's models, the Rambler factory will have added 100,000 square feet of floor space. At no time this season has the company been in a position to make shipments earlier than from thirty to forty-five days after the receipt of the order, although its output has greatly increased and is still increasing, and the universal success of the Rambler must be most pleasing to that veteran, Thomas B. Jeffery, who in such a short period has duplicated his former success in the bicycle industry.

### Moyea Deliveries Began.

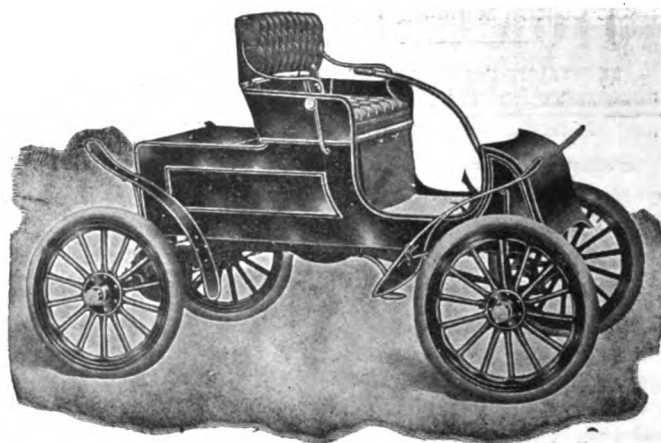
The first of the new lot of Moyea 16-20 horsepower touring cars, built by the Alden Sampson Mfg. Co., of Pittsfield, for the Moyea Automobile Co., of New York, was delivered a few days ago. Fourteen more of the same style have been contracted for, and will be delivered during the summer.

Stoltenberg & Reimers, of Davenport, Ia., have purchased some automobile parts and will assemble a few cars.

When you are looking for  
the best Runabout  
look  
this  
way



# NORTHERN



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**BUFFALO,**

28 W. Genesee St.

**DETROIT,**

284 Jefferson St.

**SAN FRANCISCO,**

114 Second St.



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CABLE ADDRESS, "MOTORWORLD," NEW YORK

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NEW YORK, JUNE 18, 1903.

### The Trade's Crying Need.

It has been well said by a close student of affairs that the successful man of business is he who carries his projects to a fortunate issue. It matters not how this is done. The important part is that it is done, and that success or failure follows upon the ability or lack of it to bring about such an ending.

To-day, with the season well advanced, the spectacle is presented of an industry still far behind its orders; of contracts entered into months ago still only partially filled; of impatient customers still importuning their principals for goods. And this condition exists, not because orders have been excessively and unexpectedly large, but because, with a few exceptions, deliveries have been smaller than was reasonably expected. In many factories the outputs to date have been small, remarkably so, and the struggle to "catch up" with orders is still going on.

It is this matter of production that is now causing much cogitation, much investigation, much weighing of facts and fancies. Why can't we turn out more goods? Is the question asked by the heads of many concerns, and seek as they will they are unable to get beyond the unwelcome truth that there is a drag somewhere, a brake applied where everything should be free and clear.

It has been borne in upon not a few of these concerns that neither splendidly equipped factories, nor careful designing, nor well filled treasuries, and not even the combination of all three, avails to produce goods in the quantities and at the times desired. Something more is required. That something is a working organization capable of getting the goods through with dispatch, of effectually preventing the sluggishness of movement that is so frequently noticeable in some factories.

There is to-day a demand for superintendents that the supply is entirely unequal to filling. Men are desired who, given all the requisites—the factory room, the machinery equipment, the designs, the materials, the men and the money, can be depended upon absolutely to produce the goods on time. Such men as these are invaluable, and they can command their own price.

For the want of them trade has been lost, anticipated profits vanished into thin air, concerns even brought to the brink of failure. To avoid a repetition of the unpleasant experience kindred trades are being scrutinized for suitable men. Necessity is behind the search, and men of the required calibre will be snapped up whenever and wherever found.

### Test the Bailey Law at Once.

In the first decision rendered upon a speeding case under the Bailey law, or Chapter 625 of the Laws of 1903, there is a certain meed of satisfaction and cause for a greater uncertainty as to how much good and evil that law is yet to work out.

The one thing that has been brought out prominently by the decision rendered in the case of Gustave Lippman, by the justices of Special Sessions in New-York City, is that the new bill of regulations is one over which the doctors of the law seriously disagree. It will be remembered that the law committee of the Automobile Club, defending its action in approving the Bailey bill, urged that one of the reasons for commending it was that it repealed the odious Cocks law,

as the 1902 amendment to Section 666 of the Penal Code, making excessive speeding a misdemeanor, is generally known. At the special meeting of the Automobile Club, called to discuss the bill, it was contended by such eminent counsel as Messrs. Guthrie and Whitney that the enactment of the Bailey bill would not repeal the Cocks law. Lawyers Church and Niles and others said that it would.

Justice Mayer in his decision, rendered in the first case tried under the law, explicitly declares that the Cocks law is not repealed, but only modified. That part of the Cocks law which imposes a limit of eight miles an hour in all incorporated cities, towns and villages, even if the local authorities do not enact an ordinance, he says, is still operative in New York City. If this is sound law it must be that the Cocks law is still operative within the limits of the incorporated villages where signs have not been erected in compliance with the Bailey law, and if this is so, the eight mile an hour restriction still applies to many localities where the automobilists have been recently fancying themselves free of restrictions.

Justice Mayer seems to have been at some pains to construe the intent and purpose of the law, and decided that the intent was to allow a speed of fifteen miles an hour in the places not thickly spread with buildings. This being so, the eight-mile-an-hour restriction of the Cocks law would not be operative on the open country roads, although they are within the village limits, as it was before. It would in all probability, if Justice Mayer is correct, be operative on the average only about half a mile from rural postoffices in case of no sign being up specifically restricting speed. It would seem, however, that this leaves the question as to where the speed limit begins and ends so open as to cause conflict; in other words, that the Cocks law, if operative in any part, would cause confusion and interference with the clear interpretation of the new law, and the Bailey law explicitly declares that "all acts or parts of acts regulating the speed of motor vehicles, inconsistent herewith, are hereby repealed." There certainly seems to be some inconsistency when one tries to make both the Cocks and the Bailey law work together, and, therefore, it will be interesting to hear from a higher court.

It certainly is a matter of no little importance to find out whether or not the Cocks law is still doing business at the old stand. At present the matter of speed requirements

is in a tangle. The law committee of the that it was preparing test cases, but as yet nothing has been done. Here is work for it. All sorts of complicated cases may get on the dockets, while the public and officials hold confused notions as to what may and may not be done. If the Cocks law is dead, let us hear the obsequies; if it is only scotched, let us know how much of its sting is in working order.

The Bailey bill certainly is one that affords room for legal quibbling, but one or two satisfying things seem to have been brought out clearly by Justice Mayer's decision. One of these is that the much talked about highway law, under which a man might be arrested when travelling at any rate of speed whatever, on the allegation that he was going faster than was reasonable and proper, does not now apply in the suburban sections, where the law implies that fifteen miles an hour is reasonable and proper.

What a mess automobilists in New-York City would be in, though, if speed restricting signs were erected on the many country roads that lie within the limits of the greater city, half a mile from every station and branch of the New-York Postoffice. According to the recent decision, this could be done quite properly under the Bailey law. In such a case there would be a limit of eight miles an hour for miles through sections not only unbuilt up, but actually wild. The more one sees of the various features of this legislative masterpiece the more cause there is for wonder.

### Bravo! Banker.

What one man can do, armed with the courage of his convictions, A. C. Banker, the well known Chicago motorist, has done. Alone he attacked the municipal Goliath, and with a single shot has brought the giant low. To-day the Chicago city licensing ordinance is a byword, and there are none who cannot, by plucking up a very little courage, defy it. Until the courts have decided whether or not it is legal and binding it bids fair to remain a dead letter.

The ordinance was attacked on its weak side. Like all measures of this kind, the claim that it is unconstitutional because class legislation is plausible and strongly supported. At the worst, it is worthy of being pressed to a judicial decision, and at the best there is the strongest kind of presumptive evidence in its favor. If the automobile is a vehicle, and as such entitled to

all the rights and privileges inherent in other vehicles, it possesses a proprietary interest in the highways, and cannot legally be discriminated against and deprived of the use of them. If it is not such a vehicle, but is the fit subject of special and restrictive legislation, the sooner the fact is known the better. It may be said, however, that a long and unbroken line of legal decisions points the other way.

The Chicago case will be watched with keen interest. An important point has been made, and the onus of taking the next step is laid upon the city authorities. Until they succeed in establishing the constitutionality of the licensing ordinance, they will be powerless to enforce its provisions, at least against any motorist who has the courage to stand upon his rights.

### The Newspaper Wonder Bump.

"Auto Causes a Runaway" is a head that is seen so often nowadays, even in the best regulated daily newspapers, as to suggest the thought that it must be one that is "kept standing" and ordered by number, as "slug so-and-so." It has not yet ceased to strike the deskmen of the dailies that it is a cause for wonder that a horse should run away at the sight of an automobile. Surely the bump of wonder—ancient phrenologists charted one such—must be developed on such heads to an extent that would entitle it to a separate hat.

Runaways on the part of horses are everyday occurrences, and under the general rule of putting the salient feature of the item in the head, we see the stories of them topped, as they should be, by the name of the person who was hurt, or who was driving, or the character and extent of the damage done, thus: "John Smith Hurt in Runaway," or "Window Smashed by Runaway." The fact that the horse was scared is an obvious implication deemed unnecessary of specific mention, and the cause of his fright also is quite incidental, merely mentioned in passing, and often omitted, because of its being recognized by every one that a horse will take fright at almost anything, and has done so since time immemorial. When, instead of its being a stick, or piece of paper, a parasol, a road roller, or a baby carriage that scares the horse, it happens to be an automobile, the editorial wonder bump swells and at once that becomes the notable fact in the story which must be put in the head. The story also becomes worth more space. Automobile Club declared two weeks ago

Not half the runaways in the city are reported at police headquarters, and not half of those that are reported are enough worthy the reportorial attention to write six lines about. All those caused by automobiles are, however, worth a short "story," even if there was no damage done.

This custom has reached the stage of the ridiculous. Automobiles have been running about the streets for five or six years, and every now and then some horse out of the thousands they pass chooses to make one an excuse for bolting, and it is yet something wonderful and deserving of comment to the men of sheltered lives who build heads at the desk. The number of horses that bolt because of motor cars is about one to ten, compared with those who make the time-honored piece of whirling paper or old stump their excuse. Perhaps this is why it is deemed wonderful.

At any rate the automobile as a horse's excuse for bolting is a boon to the space writer. We take our text from a very well regulated newspaper, which on Monday morning printed on its front page more than two inches of a story telegraphed from Newport telling all about how a horse hitched to a vehicle having "women occupants" ran away at the sight of an automobile. The women "were thrown out and one of them was hurt," but their "names could not be ascertained." There follows, however, a full detail about the occupant of the automobile. He was Major Charles Hall, of the British Army, and he was recently married, and his bride was Mrs. C. Albert Stevens, and he is residing at the Stone villa this season. Having gone so far, the article seems shy in not giving in full the genealogical tree of the Halls and the Stevenses, and in not printing all about the mechanism of the automobile. The story concludes with the reassuring statement that Major Hall was not to blame for the accident, although it is headed "Auto Causes a Runaway."

Among other things it has done the automobile certainly has seriously altered the value of news items in prominent dailies. Imagine a reporter a few years back telegraphing a story of a minor runaway accident, minus the names of the persons run away with, but giving the family history of the farmer, who was not to blame, but who cut the tree, the stump of which caused the horse to bolt!

The farmers at the State capitals try to protect the horse from motor cars; why not from other scary things? Ploughs, paper scraps and parasols should be prohibited.



## FRENCHMEN'S TACT

**"Conspiracy of Silence" Regarding Paris-Madrid Race—Speed Motodromes Projected.**

Paris, June 5.—When you are confronted by an ugly fact which you do not want your enemies to make too much of, the best thing to be done is to say as little about it as possible, or even ignore its existence altogether. Automobilists would be very glad to ignore the ugly fact of the Paris-Madrid disaster, but unfortunately it is not to be expected that the public will pass this stupendous failure out of their minds; the impression it made was so strong that Paris-Madrid will always stand up as a spectre before any further attempt to revive automobile racing, and it will be put down on the calendar of the sport like a great red line marking the final achievement of races, which, in their grandeur and disregard for the lives of those who drove the cars, recalled for the time being the chariot contests of ancient Rome.

Therefore very little is being said about Paris-Madrid. This conspiracy of silence is not intended to allay public nervousness in the hope that the whole affair will blow over and allow of a resumption of racing in the early future, because even the most ardent advocate of the sport sees that racing on the public highways is doomed, but it was feared that the incidents on the road from Paris to Bordeaux would have a disastrous effect upon automobilism generally by inducing the authorities to place the motor vehicle under still further restrictions. The best thing to do under these circumstances was to avoid any heated controversy and let matters rest without comment, so that the public would come slowly round to a clear view of the situation and see that the racing of powerful machines had no analogy with the driving of ordinary touring cars. Tact is one of those things in which the French excel.

The Prime Minister was the first to urge upon the country the necessity of not allowing itself to be carried away by the feelings of the moment and forcing the government to take measures which would prove disastrous for the automobile industry. The interests involved are too vast to be compromised by an agitation. The industry has grown by leaps and bounds, and is giving employment to at least 100,000 hands; it is bringing millions of dollars into the country every year, and is, in fact, the most prosperous of all home industries. If allowed to continue unchecked it will develop enormously in the future, but if harrassed and hindered the trade will pass into foreign hands. The Prime Minister implied that the government was ready to assist the industry in every possible way, and in view of this promise it is to be hoped that the revision of the automobile regulations which is to be made as the result of the recent

accidents will not affect the position of private owners, though there can be no doubt that the new laws will finally put an end to speed contests on the public highways in any shape or form. The minister has, in fact, given his word that no more races will be sanctioned.

While racing has been prohibited it is clear that speed contests cannot be dispensed with altogether. They have proven extremely valuable in the past, and have provided makers with data which have enabled them to perfect their cars in a way that would not otherwise be possible. From the heavy, noisy, cumbersome, unweildy, and evil smelling vehicle of ten years ago, has been evolved an elegant type of light, silent, fast and perfectly safe carriage, simply because the testing of cars for speed has eliminated imperfect designs and unsuitable materials, and has resulted in what is really the survival of the fittest. The late race has shown that this evolution of high powered cars has been carried too far. But it does not prove that speed tests are no longer necessary. If these were suppressed altogether we should find makers adhering to their present type of car, which, however good it may be, certainly does not represent perfection, for a perfect automobile implies a combination of qualities which are in some cases so far conflicting that they can only be conciliated by a long process of careful test and experiment. Speed contests must therefore always be necessary for the industry, in order to test the various devices which are to bring about this perfection, but it is not indispensable that they should be carried out in the same way as they have been done in the past. Having attained the maximum speed possible on roads, the only thing to be done is to utilize speed as a means of testing efficiency and resistance. The method most usually recommended of trying cars in open competition is to avoid the danger of excessive speed by limiting the cylinder capacity of the engine.

As speed is such an important factor for testing cars the sport cannot be suppressed. It will simply be carried out under entirely different conditions, and will be confined to enclosed tracks known as motodromes. At the time racing was temporarily put a stop to after the Paris-Berlin event, there was a proposal to lay out a track of this kind, and several sites were suggested, but as the government afterward took a more lenient view of racing, and even organized a race on its own account with alcohol, the idea of a track was abandoned. It has now been revived. Suggestions for quite a dozen tracks are being made in different parts of the country—one on the vast sandy plain of the Landes in the Southwest of France, others around the Forest of Rambouillet, the Forest of Fontainebleau, on the west coast, and in the neighborhood of Paris, the last named being now under the consideration of the Automobile Club of France. The length of the various tracks vary from fifty to sixty miles, and they would, of course, be laid out with gradients and different surfaces, so as

to resemble the actual conditions of traveling on the public highways, as much as possible. The prospects of these tracks are highly encouraging, and doubtless in a week or two we shall hear something definite about the negotiations now being carried out by the Automobile Club.

The dangers of racing as revealed by the terrific speeds attained by the new machines have made a great impression, even in Belgium, where the newspapers have lately been suggesting whether it would not be desirable to suppress the Ardennes circuit race, which was to have taken place on the 20th of this month. In view of this opposition the organizers have deemed it advisable to postpone the date of the race and entirely remodel the regulations so that the event may be run off under conditions of absolute safety. The circular course will be roped off for the whole distance, so that no one will be allowed on the road during the time of the race. Arrangements are being made with the well known petroleum refiner and automobilist, M. Henry Deutsch, for the oiling of the course to prevent dust being raised by the passage of the cars, and if the expense is not too heavy this will be done, though M. Deutsch is something of a philanthropist where automobilism is concerned, it is not likely that the cost will stand in the way of the course being oiled. The Ardennes road will therefore be practically a motodrome, offering the same guarantee as an enclosed track. It is also intended to limit the number of vehicles starting to forty, and if any of these should show such an inferiority in speed during the race that they necessitate the frequent passing of cars they will be promptly withdrawn. The start and finish will take place away from the towns and villages where crowds may be expected to assemble. With these arrangements, it is difficult to see how any accidents can possibly occur, except to the drivers themselves, and then only through their own want of skill, and as the safety of the public is absolutely assured, it is understood that the Belgian Government has already stated that it will not oppose the holding of the race, so that nothing remains to be done but secure the permission of the local bourgmestres.

So far as can be seen at present the Ardennes Circuit will be the only race to be held on the public roads on the Continent this year. In France the outlook is almost hopeless. It is extremely doubtful whether the Association Générale Automobile will get permission to run off the Circuit de l'Argonne, which was to take place next month in the eastern departments of France on the lines of the Ardennes Circuit. If the road can be converted into a temporary track in the same way as is being done in Belgium perhaps there may be some hope, but at the moment the outlook is extremely dubious. The meeting to be held at Aix-les-Bains next month has had to be modified by the suppression of the speed tests, which have been replaced by trials of touring cars, and, in fact, the immediate result of the prohibition

## DAIMLER'S DISASTER

**Loss Will Reach \$500,000.—Seventy Cars, Including Cup Racers, Destroyed.**

of racing has been to give special prominence to events for touring vehicles. To this extent the change in the situation of the sport is not altogether without advantage, since by relegating the sport to enclosed tracks more interest will be centered in touring car events, so that both types of cars will be receiving a proper share of attention. Matters are therefore likely to settle down in a way which will ultimately have a satisfactory effect upon the industry.

Immediately following upon the suppression of racing in France the question naturally arose whether the accidents in the Paris-Madrid race would have the result of inducing the British Government to repeal the law authorizing the Gordon Bennett Cup event in Ireland. Of course, the Government could do nothing of the kind. The race merely affects Ireland, and so long as that country insists on the race being held the Government could not do anything which would ruffle the feelings of the Irish people. It should be remembered, too, that the conditions of the contest are entirely different from those of the Paris-Madrid race. There are only twelve vehicles competing for the Gordon Bennett Cup, all in the hands of the most experienced drivers, and with the arrangements being carried out for keeping the public off the road and avoiding as much as possible the passing of cars, the risks of accident will be reduced to a minimum. In fact, the precautions being taken to guard the course with a whole army of soldiers and police seem to be a little excessive. However, it is better to err in this way than on the side of loose organization, which was largely responsible for the collapse of the Paris-Madrid race.

The sporting commission of the A. C. of France have decided not to make any classification of the cars according to the first day's run from Paris to Bordeaux, and no prizes will be awarded except the two for cars making the best times to Bordeaux—the one offered by the town of Bordeaux, and the other, the Arenberg Cup, which goes to the vehicle running with alcohol. Gabriel, the driver of the winning Mors, secures the first of these prizes, while the Cup is awarded to Rigolly, who made the fastest time in the category of alcohol cars with the 110 h.-p. Gobron-Brillié which we illustrated a few weeks back.

According to a wire received to-day from Brussels the Belgian Government has officially sanctioned the Ardennes Circuit, which is to take place on the 22d and 23d instant. Among the new rules enforced is one fining all club members \$100 who may be found driving their cars on the course on the day of the race, and if they refuse to pay this fine they will be expelled from the club. There are evidently going to be no half measures about the organization of the Ardennes Circuit.

Encouraged by the complete success of their Decoration Day race meet, the Dayton Automobile Club contemplate repeating it this fall. A strong effort will be made to secure the entries of a number of prominent racing men.

Additional reports from Cannstadt, Germany, fully confirm the early ones relative to the almost incalculable loss sustained at the Daimler works there through the disastrous fire of June 10. The six special Mercedes cars building for the Bennett Cup race were destroyed, and the German team will be obliged to use the cars already in use, such as the Paris-Madrid racers, etc. In all, some seventy cars were destroyed, and the total loss will reach \$500,000. This is fully covered by insurance. It is calculated that the fire will cause a delay of about three months. It is fully expected, however, that by the end of the year the damage will have been fully repaired and the concern be in splendid shape for the 1904 season.

The fire began shortly after the round of the night watchman, who noticed nothing unusual. At 3 o'clock in the morning, twenty minutes afterward, the whole factory was in flames and assistance was useless. All the carriages in the principal hall were totally or partially destroyed, and among these were six 90 horsepower machines to be sent to Ireland for the cup races. Nearly seventy carriages, most of which were in the finishing stage, were totally lost.

The greater part of the motors were in other building some distance away undergoing trials, and were saved, as were also a number of carriages which were being painted. Fortunately the machinery, tools and designs were also intact.

The conflagration caused an immense sensation in the vicinity, as the works employed 850 hands, without counting a large number of workmen employed for special branches, such as the construction of radiators, body making and upholstering.

At a meeting of the directors of the company a telegram arrived stating that the Württemberg government had placed at its disposal an immense workshop situated almost at the door, and a great part of its locomotive factory at Essling. A decision was at once taken, and notice was posted at the gates to the effect that work would be resumed in a few days' time and that the workmen's pay would continue as if there had been no stoppage. This decision, which will cost the company about 5,000 francs (\$1,000) a day, caused the greatest satisfaction. The total loss occasioned by the fire may be stated at 2,000,000 marks (\$500,000). It is fully covered by insurance.

The delay in the delivery of the vehicles caused by the fire will be three months at most, and at the end of the present year the Daimler company will be up to date with deliveries and that those of 1904 will be made according to promise.

It is understood that all the cars delivered

henceforth will be constructed with all improvements destined for those of 1904, and that Herr Maybach, the firm's chief engineer, has since the Paris-Madrid race made technical changes of the highest importance.

## Hoosiers' two Day Meet.

The meet scheduled for May 30 at Indianapolis, Ind., and twice postponed on account of rain, is now set for Friday and Saturday of this week, June 19 and 20. The entry lists have been reopened, and a five-mile heat race between Barney Oldfield and Tom Cooper arranged as the star event. Besides these, a number of fast cars have been entered. They include the Oldsmobile "Pirate," which made such a killing at Ormonde, Fla., in March, and the "Scow," as the new General racer has been dubbed.

The programme has been entirely rearranged, necessitated by the change from a one to a two day meet. It is as follows:

Friday—1, three-mile motorcycle handicap, 1:50 class; 2, 1,200-pound class, open to Olds, Ramblers, Cadillacs, Franklins, Generals, Hoffmans, etc.; 3, owners' race, five miles, 2,000-pound class, 20 horsepower and less; 4, five-mile motorcycle handicap, 1:20 class; 5, first heat, five-mile match race, Tom Cooper vs. Barney Oldfield; 6, grand five-mile handicap, open to every first or second place winner in previous events.

Saturday—1, four-mile motorcycle handicap, open; 2, three-mile, open, for 1,200-pound class; 3, five-mile, open for 2,000-pound class, 20 horsepower; 4, five-mile pursuit race, George Weldely vs. Earl Kiser; 5, second heat five-mile match, Tom Cooper vs. Barney Oldfield; 6, winners' handicap, five miles, standing start, open to first and second prize winners; 7, third and final heat (if necessary) of match race.

## No More Regular Runs.

There will be no more regular runs of the Automobile Club of America for the summer. There may be one or two called in the months of July and August, each to some shore resort, but more than these the committee in charge does not look forward to, owing to the general absence from the city of the majority of members.

After the heated term a schedule will be made out, including the run to Montreal and return. Routes and details of this run are being worked out by Secretary Butler from the excellent maps on file in the clubrooms.

## Harmonious Relations Exist.

The published report that there was ill feeling over the selection of two Panhard's and only one Mors car to represent France in the Bennett Cup race has brought out denials from the makers of both cars. The best of feeling exists, they say, and they will use every effort to bring the cup back to France.

"Essence" is the French name for gasoline, as "petrol" is the English term.

## BRITISH TRAFFIC CARS

Some Features of the Coulthard and Lancashire Wagons—Cost of Operation of Former, Based on a Yearly Run.

London, June 6.—Another firm which has done much to advance the cause of heavy motor traffic is Messrs. T. Coulthard & Co., Ltd., of Preston. Mr. Coulthard was among the first to realize what the passing of the Light Locomotives act really meant in the matter of steadily revolutionizing road traffic, and he foresaw that there would be a great commercial opening for heavy lorries and vans for the conveyance of goods. Moreover, residing near Liverpool, he had the advantage of noting the efforts made by the Liverpool Self-Propelled Traffic Association, and the effects of the experiments conducted. The

means of which the power is transmitted direct to the felloes, a plan which greatly reduces the strain upon the wheels. The brake provided is most powerful, and is double acting. It will hold the vehicle on



FIG. 5. LANCASHIRE 4 TON GOODS WAGON. practically any ordinary hill in either direction. The boiler is one of the vertical tubular type, centrally fed from the top and fitted with double check valves. Its working pres-

trolling the brakes, steam valves and boiler feed taps being within easy reach of the driver. The road wheels are of the same diameter, namely, steerers, 2 feet 9 inches, and drivers, 3 feet, and the only difference in connection with them is that the tires are 5 inches and 7 inches, respectively. The steering of both the vehicles is done by means of an inclined wheel. The six-ton wagon is somewhat larger, the dimensions being: Length, 19 feet 9 inches; width, 6 feet 6 inches; height over chimney, 8 feet 10 inches; platform, 14 feet by 6 feet 6 inches, giving an available area of 91 square feet. The speeds are arranged at  $2\frac{1}{2}$  and five miles an hour. Fig. 1 shows one of these wagons fully loaded, and Fig. 2 one of the tip wagons made by the firm, and having the same carrying capacity.

The annual expenditure on the same basis as that taken for the smaller wagon, but for an average of 30 miles per day, comes to £187 10s. In neither of these estimates have

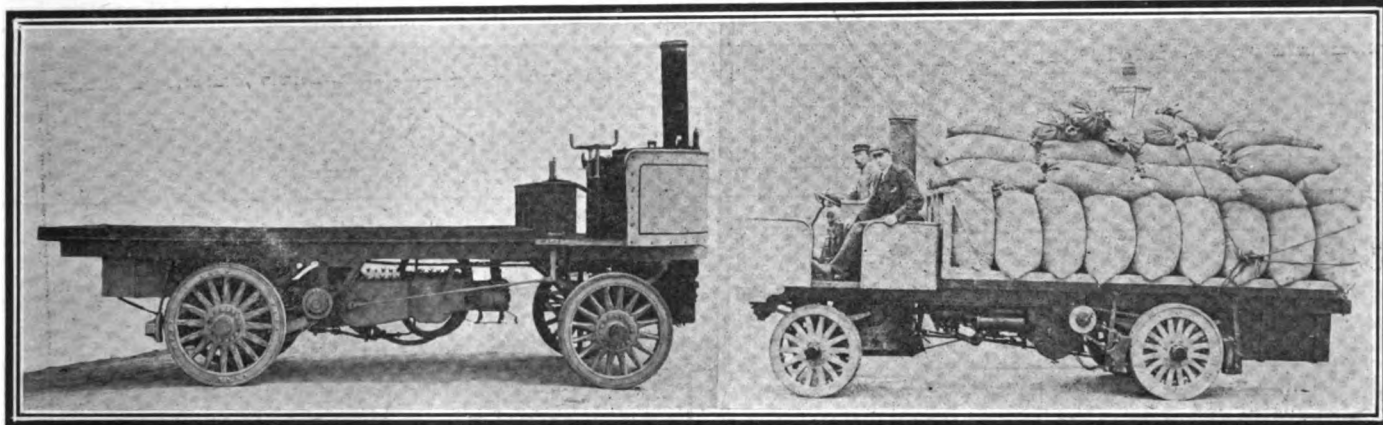


FIG. 3. LANCASHIRE 4 TON LORRY.

FIG. 1. COULTHARD 6 TON WAGON, LOADED.

"Coulthard" wagons and lorries are the direct outcome of these experiments, and are now extremely popular. Practically they are made in two sizes, the lighter having a carrying capacity of four tons, and the heavier type being able to convey from five to six tons over good roads and up average gradients. As with all kinds of wagons, a great deal depends upon the nature and condition of the roads, but the figures given are for average conditions. Taking the four-ton vehicle, which is an extremely useful type, the dimensions are: Length over all, 17 feet 6 inches; width, 6 feet 4 inches; height over chimney, 8 feet 6 inches; platform space, 11 feet 6 inches by 6 feet; fuel bunker capacity, 4 cwt., or enough for about 35 miles; water tank capacity, for from 12 to 15 miles; speeds, 3 and 7 miles an hour; weight, 3 tons 5 cwt. The vehicle with the slow speed in action will easily climb an incline of 1 in 10 when fully loaded. The engine is of the compound pattern, having link reversing gear, and the casing, which is perfectly oil-tight, is extended and encloses all the gearing, including the differential, which is on the countershaft. The transmission from this shaft to the road wheels is by means of large roller chains. The driving wheels are provided with triangular attachments, by

sure is 200 lbs. to the square inch, and it is tested to 400 lbs. The feed is by means of a dustproof pump connected with the countershaft, while a separate pump is also fitted as an emergency feed.

The cost of running is worked out by the firm as follows:



FIG. 6. LANCASHIRE 3 TON TRAILER.

	£	s.	d.
Twelve pounds of coke, or coal, per mile for 40 miles per day, taking 260 working days per annum and the cost of coke at 10 shillings per ton.....	28	0	0
Driver, at 30 shillings per week..	78	0	0
Sundries and repairs.....	75	0	0
Lubricating oil and waste.....	10	0	0
Total .....	£191	0	0

Coming to the five and six ton wagons built by Messrs. Coulthard, the details are practically the same as those of the smaller vehicles, all the handles for driving and con-

I taken into consideration the interest upon capital invested—in the one case £550 and in the other £650—nor have I allowed for depreciation. It would only be fair to put the interest at 5 per cent and the depreciation at 15 per cent in each case.

The third large English firm supplying steam motor wagons is the Lancashire Steam Motor Co., Ltd., of Leyland. The company construct steam wagons and lorries in various sizes, the principal patterns being a four-ton lorry, a four-ton covered van, a five-ton tip wagon, and a six-ton wagon designed for colonial use. The engine employed is a compound, having reversing gear and cylinders with  $3\frac{1}{2}$  and  $4\frac{1}{2}$  inch bore and 6 inch stroke, developing full power at 420 revolutions per minute. The change speed gearing and the differential gear on the countershaft are completely enclosed with the engine, so that all the parts are constantly lubricated. From the ends of the countershaft the power is transmitted by Hans Renolds chains, and the pinions on the countershaft are mounted on spring cushions, which greatly relieve the chains and working parts generally. The "give" of the spring drive thus obtained is sufficient to permit the engine to complete very nearly one revolution before the full power is exerted upon

the road wheels. The shaft of the differential is hollow, and a bolt passes through it from end to end, thus taking up the thrust of the bevel wheels and reducing the friction upon the bearings. The balance gear can be locked by an internal clutch, actuated by a lever under the frame of the wagon, but I cannot see any advantage in this particular arrangement. All the working parts of these vehicles are made to templates, are perfectly interchangeable and all are numbered, so that replacements can be easily obtained. The boiler is tubular and has a heating surface of 80 square feet. The working pressure is 200 lbs., and the test up to 425 lbs. The safety valve is set at 225 lbs., and blows into the water tank. The automatic feed pump is driven off the countershaft. The coke supply is enough for a day's run. The water tank has a capacity of 130 gallons, and is provided with a removable strainer. With each wagon a water lifter, with 30 feet of suction pipe, is supplied.

wagons will soon become more common in this capacity. Already three or four patterns are being offered. At present they are somewhat in the experimental stage, with perhaps the exception of the "Milnes."

#### Prohibition Merely Temporary.

The St. Paul (Minn.) Park Board has passed a resolution defining its attitude toward automobiles in order to prevent misunderstanding because of its previous resolution forbidding automobiles on that part of the Mississippi boulevard between Summit and Cretin avenues and in Indian Mounds Park.

By the resolution the board says that such prohibition is not intended as showing an opposition to the use of automobiles, and in the cases mentioned they are prohibited only because of the danger of frightening horses on the narrow roadways in those portions of the park system. The prohibition is intended to be temporary only, and as soon

#### Picric Acid Saves Half.

Although considerably talked of, picric acid is a chemical about which the ordinary motorist knows little. The experiments that have from time to time been conducted, have shown that certain good results can be obtained by an admixture of a very small quantity of the acid with ordinary gasoline; but its use is attended with disadvantages that seem to render its practical use little short of an impossibility.

Picric acid is a highly explosive substance, and is the active constituent in the making of lyddite. The amount of heat generated by its explosion is somewhat greater than that produced by ordinary gunpowder, but rather less than that of gun cotton.

In "chemical" language, picric acid is "trinitrophenol," which, being interpreted, means that it is formed by the action of phenol—or carbolic acid—with nitric acid, the latter being mixed with sulphuric acid.

Enthusiasts who have used it report that,

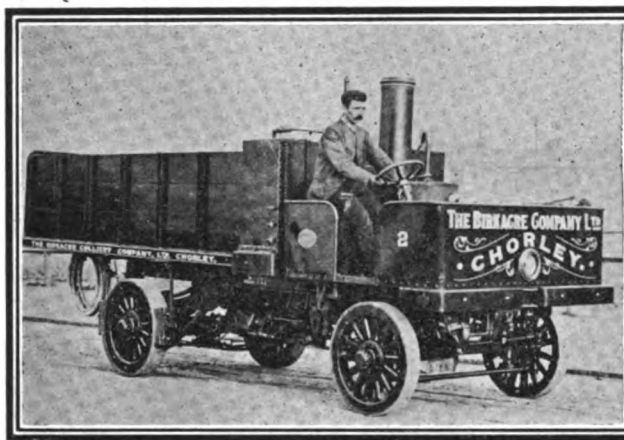


FIG. 2. COULTHARD 6 TON TIP WAGON.

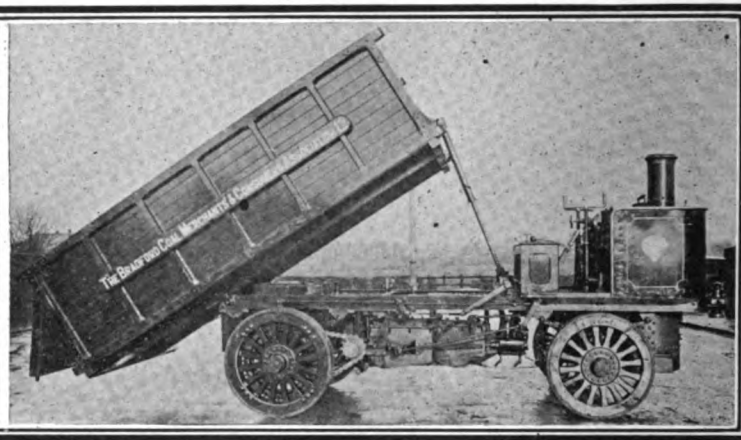


FIG. 4. LANCASHIRE 4 TON TIP WAGON.

Over ordinary roads in a fairly level country the day's run can be put at 50 miles, which can be accomplished in 12 hours. Fig. 3 shows the four-ton lorry, Fig. 4 the five-ton tip wagon, and Fig. 5 the four-ton wagon. In all cases the details of the vehicles, so far as the driving mechanism is concerned, remain the same. It should be noted that the engines fitted to these wagons are so arranged that the larger cylinder can be worked at high pressure for the purposes of getting out of difficult places, and that the engine bearings are very large and long, presenting enormous surfaces. The firm also make trailing lorries for attachment to their steam motor wagons, and capable of carrying an additional two or three tons.

The firm have supplied steam wagons for municipal work to many large towns, notably to the Liverpool Corporation, while at the last trials held their lorry proved to be the lightest and took the greatest paying load on the least consumption of fuel and water. It also proved to be the only vehicle of this class yet produced to come under the three-ton limit.

Practically all the heavy motor vehicles used in England are steam driven, but lately there has been an indication that petrol

as it is possible to consider such danger no longer to be feared the automobiles will be allowed in all the parks and parkways.

The resolution was adopted, it was explained, to satisfy the owners of automobiles, who might otherwise think that the new motive power was discriminated against.

#### Good Roads for Auto 'Bus.

Spurred on by the promise that automobiles would be put on to carry the mails between Knoxville and Sevierville, Tenn., as soon as the road was put in good order, measures have been taken to bring about the desired improvement. Knox County has already appropriated \$10,000 with which to put the pike lying within its boundaries in shape, and Sevier County came along and voted bonds for the same purpose. As soon as the contract is let the work will begin.

More than one hundred automobiles are owned and driven in Savannah, Ga., and the number is being added to rapidly.

Motor water carts have been adopted at Cardiff, Wales.

mixed in the proportion of 1-10 ounce to half a gallon of gasoline—which should contain from three to five per cent. of paraffin—it gives marvellous results. A chemist to whom the question was put, expressed the belief that a mixture in the proportion mentioned above would increase the "work" of half a gallon of gasoline to that of one gallon. In other words, should the chemical expert be right, the motorist who can get thirty miles out of his machine on a gallon of gasoline will be able to get sixty miles out of that quantity by adding a small proportion of paraffin and 1-10 ounce of picric acid.

Unfortunately, in the composition of picric acid are some oxides of nitrogen, which have a corrosive influence on metals, and until the extent of the effect of this in the cylinders of the engine has been determined, motorists would do well to be cautious in the use of the acid.

The admixture of a small amount of paraffin "eases" the picric acid explosion, so that there is not so much vibration as would otherwise be the case.

Picric acid costs about 25 cents per ounce, so that a motorist can get the value of nearly ten gallons out of five of gasoline. Picric acid, unless bought for dyeing purposes (when it is sold in bottles), can only be bought from a chemist who possesses an explosive license.



## ORDINANCE NULLIFIED

### Injunction Granted by Default Against Chicago License Board in Banker Case.

Second blood, and copious draughts of it, too, has been drawn by A. C. Banker, the courageous Chicago motorist, who has, single handed, fought and so far prevented the authorities of that city from denying him the right to run an automobile on the streets.

First blood was drawn several weeks ago, when Banker secured a temporary injunction restraining the municipal authorities from depriving him of the freeman's privilege to use the public highways. It will be recalled that Banker was refused a renewal of his license until the period for which he had been disciplined had expired; and meanwhile he was threatened with arrest if he appeared on the streets in an automobile. Banker then, through his lawyer, boldly attacked the constitutionality of the licensing law, and asked for and obtained the temporary injunction already referred to.

He next asked to have the injunction made permanent, at least until such time as the constitutionality of the law could be argued and denied or affirmed.

Judge Healy, sitting as a Circuit Court judge on Judge Neely's bench, granted the injunction last week. The restraining order is based on the ground that the city has, in the first place, no authority under the State law to require a license on automobiles or to collect license fees. In the case of saloons, cabs and peddlers, specific authority is granted by the legislature for the enforcement of the license system.

It is contended by Banker that, if the legislature grants such authority, it must include all private vehicles, or the ordinance might be attacked as class legislation.

"We expect to stand on the same ground as the owners of other private vehicles," said Banker. "If the city compels automobiles to carry numbers, every coupe, victoria and brougham will have to carry them. If the automobile driver is to be licensed, the driver of the carriage should be licensed, too.

"They are trying at the City Hall to draft an ordinance that will be legal, and I am told that they cannot do it. I presume this injunction will carry us through the summer, and then the matter can be permanently settled.

"I imagine the numbers will come off quickly now. There is no question but that the laws will protect automobiles from being discriminated against."

Banker was represented in the case by William A. Jennings. Judge Healy, who granted the injunction, comes from out of the city.

The city did not appear in the proceedings, and there was no defence of the ordinance. The city authorities say they were not given sufficient notice that the motion was to be argued.

## German Cup Team Changes.

Another change has been made in the German Bennett Cup team, according to the latest dispatches. As now arranged, the team will consist of Foxhall Keene, Baron de Caters and Herr Wenatzy, who will all drive 6 horsepower vehicles. Their substitutes are Hieronymus and another amateur who wishes his name to be kept secret.

Two engineers and a staff of workmen will arrive in Paris this week from Cannstadt with the necessary tools to prepare these cars in the same manner as they did for the Paris-Madrid competition.

### With 14 Men Aboard.

Shelby street hill is one of Detroit's "tough propositions," having a 14 per cent grade and rising like the proverbial "side of a house." It takes a worse grade than this, however, to feaze the Cadillac, and one day



CADILLAC, WITH ALMOST A FULL LOAD, CLIMBS 14 PER CENT. GRADE.

recently, just to see what that little car would do, it was prepared for a test. A wagon weighing 1,500 pounds was hitched to it, the two vehicles loaded up with fourteen men, and the car's head turned in the direction of the hill. Up it went, drawing its novel load, and reached the top without trouble.

### Long Islands to Try Again.

Again this fall, in October, the Long Island Automobile Club will employ the running track at Brighton Beach for races, and under the new rules of the American Automobile Association will arrange to have the contests more snappy and attractive generally than they were last August. The idea of having the races in October is that then every one will be back in town and the chances for a big attendance will be better.

### July 4 Meet at Columbus.

Columbus, Ohio, will enter the automobile racing game. A meet will be held on July 4, under the auspices of the newly formed Columbus Automobile Club. This was decided upon at a meeting of the club held last week.

## MORE AMENDMENTS

### Massachusetts Bill Reported With Milder Penalties Imposed for Violations—May Pass.

The Massachusetts automobile bill is again back in the House of Representatives. The House Committee on Ways and Means, to whom the bill was recommitted, last week reported that "the same ought to pass in a new draft with certain amendments herewith submitted."

The changes referred to are, with two exceptions, unimportant. One of these exceptions is the reduction of the penalty for violation from a sum "not exceeding \$200" to a maximum of \$50 for the first offence and \$100 for the second offence.

The second important change is in the section relating to frightened horses. In its

amended form it is as follows, the words in brackets having been added:

"Every person having control or charge of an automobile or motorcycle shall, whenever upon any public street or way and approaching any vehicle drawn by a horse or horses, or any horse upon which any person is riding, operate, manage and control such automobile or motorcycle in such manner as to exercise every reasonable precaution to prevent the frightening of any such horse or horses, and to insure the safety and protection of any person riding or driving the same. And if such horse or horses appear frightened, the person in control of such automobile or motorcycle shall reduce its speed, and if requested by signal or otherwise by the driver of such horse or horses, shall not proceed further toward such animals unless such movement be necessary to avoid accident or injury, or until such animal appears to be under control of its rider or driver [and, in case of extreme fright, shall reduce the motive power to a full stop]."

No change in the speed clauses has been made. The maximum is twelve miles in the cities and towns and fifteen miles outside of them.

There is a strong likelihood of the bill being passed in its present form.



## INTENT OF THE BAILEY LAW

(Continued from page 440.)

guards for the citizen travelling upon the public highway, whether on foot, on horseback or in vehicles, and with that end in view to allow a greater latitude in respect of the regulation of speed in the outlying parts of cities and other communities than was permissible in those parts of cities or other communities where the highways are much used, either for purposes of business or pleasure. Agreeably with this general scheme, the legislature, in the act in question, has provided various maximum rates of speed to be observed by persons driving automobiles or motor vehicles when passing foot passengers, or when passing persons driving horses, or when passing intersections of a main highway, or when passing public schools during school hours, or churches on the Sabbath day.

Chapter 625 of the Laws of 1903 does not expressly repeal or modify Section 666 of the Penal Code. Section 666 of the Penal Code, however, is clearly modified by implication to the extent to which its provisions are inconsistent with the provisions of Chapter 625 of the Laws of 1903.

### COCKS LAW STILL IN FORCE.

In other words, Section 666 having made it unlawful for a person to operate an automobile or motor vehicle at a rate greater than eight miles an hour in a city, except where there is an ordinance permitting such greater rate of speed, and there being no such ordinance in force and effect in the city of New York, said Section 666 of the Penal Code is still in force, except in so far as limited or modified by Chapter 625 of the Laws of 1903. These limitations or modifications are: Permitting a speed:

1. Up to fifteen miles per hour where the houses in a city, upon any highway, are more than one hundred feet apart, except as further limited by 2, 3 and 4 seq.

2. Up to eight miles per hour where the automobile or motor vehicle "shall pass a person driving a horse or other domestic animals, or foot passengers walking in the roadway of the highway, or cross and intersecting main highways." This provision relates to all parts of the city, including those parts where the houses are more than one hundred feet apart.

3. Up to ten miles per hour while passing a public school, on the days when school is held, between 8 a. m. and 4 p. m.

### APPLIES TO POST OFFICE STATIONS.

4. Up to ten miles an hour while passing a building of public worship on the Sabbath day during the usual hours of service. Both the limitations Nos. 3 and 4 apply where the place of public worship or school is situated in a part of the city where the houses are more than one hundred feet apart; for in closely built up portions of the city the eight mile per hour speed applies.

5. Up to eight miles per hour upon any highway within a distance of one-half mile

of any postoffice, if the local authorities indicate by an appropriate sign that speed is to be reduced to the rate of eight miles per hour. This provision would apply to the city of New York anywhere within half a mile of the postoffice or any of the various stations of the Postoffice Department, at such time as the local authorities may hereafter erect the signs required by the statute.

### WHAT THE LEGISLATURE MEANT.

In considering the foregoing limitations we have not referred to the power of the authorities having charge or control of the parks or highways. These authorities have plenary power to pass, enforce and maintain regulations, ordinances or rules regulating the speed of automobiles or other motor vehicles in public parks and upon highways and driveways in the city of New York under the exclusive jurisdiction and control of the Department of Parks of said city.

In construing this statute in relation to the facts presented in this case it is necessary to determine what the legislature meant in its reference to the parts of a city where the houses upon a highway are more than one hundred feet apart. This provision was not intended to refer to isolated instances, where by reason of the tearing down of buildings or some other cause there are spaces where houses are more than one hundred feet apart, although such places are in the closely built up portions of the city; nor was it intended to refer to those parts of the city fronting upon parks like Central Park, where no houses are situated on one side of the highway, but where the other side of the highway is closely built up. It was clearly intended to apply to the outlying districts of the city, where there is not so great a use of the highways; and therefore in such outlying districts, although here and there there may be houses close together, yet the permissible rate of speed is to be determined by the general character of the neighborhood—that is to say, the distance generally of the houses from each other.

In the case at bar there is no evidence that the defendant passed a school during school hours, or a place of public worship on the Sabbath day, or a person driving a horse or horses, or other domestic animals, or foot passengers walking in the roadway of the highway, or that he crossed an intersecting main highway, or that he was within one-half mile of a postoffice, and that notice thereof was duly posted on the highway. It is true that there is testimony that over the particular distance where he was timed the houses were less than one hundred feet apart; but it also appears that the general character of the neighborhood was that of an unbuild portion of the city.

It is clear, therefore, that the defendant was not violating Chapter 266 of the Laws of 1902 in speeding at a rate of more than eight miles an hour.

The only provision of law therefore applicable is Section 167 of the Highway law, which is unamended and now in force and

effect. This section provides as follows:

"Use of Highways by Automobiles.—No person driving or in charge of an automobile or motor vehicle on any street, avenue, parkway or driveway in this State shall drive the same at any speed greater than is reasonable and proper, having regard to the traffic and use of the highway, or so as to endanger the life or limb of any person."

### "REASONABLE AND PROPER" SPEED.

What is a reasonable and proper speed must be determined by the court. There being no restrictive ordinance, it may be that in the unsettled parts of the city not coming within the limitations above described a rate greater than fifteen miles an hour would be a reasonable and proper speed. Chapter 625 of the Laws of 1903 has, however, practically determined what was the minimum which could be considered a reasonable and proper rate of speed for the kind of locality in question; for, by enacting that no ordinance could be passed by the authorities of any municipality requiring a slower rate of speed than fifteen miles an hour in localities such as that in question, the legislature has declared that, in any event, fifteen miles per hour is a reasonable and proper rate of speed in such locality with due regard to the traffic and use of the highway and the safeguarding of life and limb.

The testimony having shown that the defendant operated a motorcycle at the rate of fifteen miles an hour, that rate was reasonable and proper, as above described, and therefore the motion to dismiss must be granted, and the defendant is acquitted.

### To Start on October 15.

October 15 is the date now set by the Black Diamond Automobile Co. for beginning operations at its new plant at Geneva, N. Y. Ground will be broken on August 15 for the building, which is to be erected at Torrey Park. It will be 150 by 250 feet, and with the exception of the front, which will be two stories for office room, it will be a one story structure. It will be provided with modern machinery throughout and will be completed on October 15. Operations will be begun with 150 hands the first year.

At present \$200,000 worth of stock is said to have been subscribed and about \$75,000 more has been pledged. The capital stock will be \$500,000, fully paid in and non-assessable.

At a meeting of the company held at Geneva last week it was given out that the model was expected to be completed in about three weeks. It will be "geared to run sixty miles an hour." After it has been exhibited in New York, it will be shown in Geneva.

### Rent for Double Figures.

So great is the demand for buildings in this city suitable for garages that stables are now being rented for double the sums obtained for them when used to house horses.

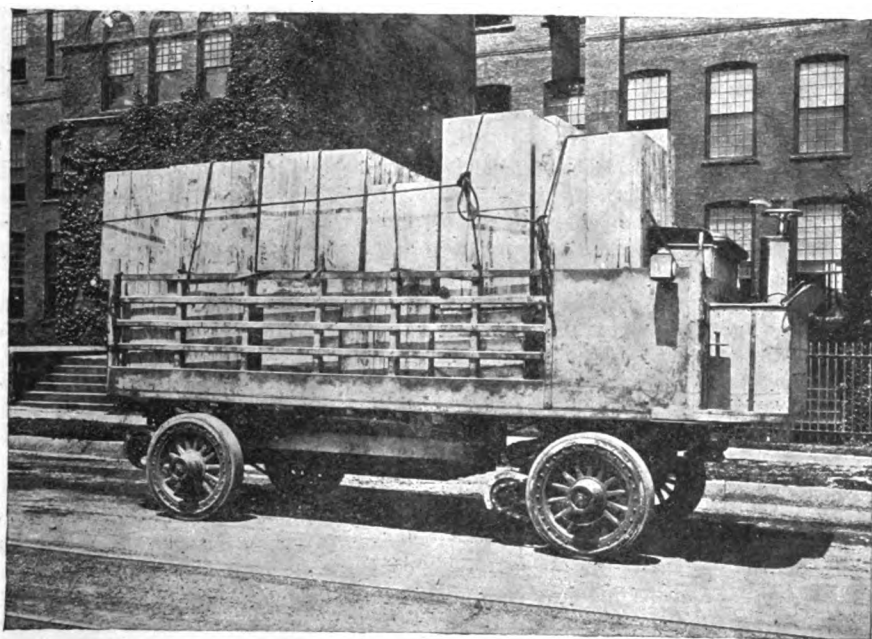
## FOUR WHEEL DRIVE

**New Columbia Electric Truck has This Feature  
—Also Steers by Electricity.**

Marked advances over ordinary self-propelled vehicle construction are to be found in the new Columbia electric five-ton truck, made by the Electric Vehicle Co., of Hartford. In it is exemplified the first commercially successful attempt to apply power to all four wheels and to steer by other than manual power.

The general lines of the construction of the vehicle proper follow quite closely standard horse truck construction of the well known

driven by a worm on a short shaft, which can be clutched to the steering motor or not, as desired. This arrangement affords a rigid back lock, holding the wheels securely wherever the motor leaves them. In order to give perfect steadiness of steering, especially when coasting or when little power is required, a solenoid released brake is put on the armature shaft to stop its rotating instantly the power is turned off. This simple device makes it possible to run the truck as fast as eighteen miles per hour and hold a perfectly true course. When the front truck is swung at right angles to the body it automatically cuts the power from the rear wheel motors, this arrangement preventing the front tires from being shoved sidewise when the vehicle is turned in a short circle.



**ELECTRIC TRUCK, WITH LATEST IMPROVEMENTS.**

"New York gear" type. The large fifth wheel at the front permits the front axle and wheels to be swung at right angles to the body, giving a very short turning circle and permitting the vehicle to be turned around in a space which is practically of its own length. All four wheels are alike and of the standard Sarven type, mounted on very large roller bearings.

Four very powerful motors are used for driving, one for each wheel. These are suspended directly from the body of the vehicle, transmitting power to the wheels by heavy roller chains. The wheel sprockets are bolted directly to the spokes, giving a simple but strong construction. Chain adjustment is provided by a powerful strut between the axle and the motor. This is so made as to allow for working and twisting of the body without any twist being imparted to the strut.

The front truck is steered by means of an electric motor. A very large, broad faced steering sector is carried by the truck. This sector meshes with a large pinion at the lower end of a short, thick vertical shaft, at the upper end of which is a worm gear

The steering motor is controlled by a short tiller placed immediately above the main controller. It is so adjusted that if it is swung through, say, 15 degrees, the front truck swings through the same angle and then comes to rest. The direction of the tiller is always indicative of the direction of the progress of the vehicle. Means are provided to steer the truck by hand in case of accident to the motor or battery.

The trust is provided with a powerful winch operated by the steering motor when it has been unclutched from the steering gear and coupled to the clutch gear. This change can be quickly made by the operator.

The battery consists of 44 oxide cells of 280 ampere hours capacity, arranged in a tray hung below the body by the well known exclusive Columbia method. The battery can be readily removed by one man, although it weighs 3,500 pounds. A new method of battery suspension from three points has been introduced in this vehicle. With so large a truck, having a platform approximating 16x6 feet in dimensions, it is naturally difficult to keep it perfectly flat at all times when it is in service, and by means

of this suspension all warping and twisting of the battery is eliminated, which could not be the case if it were suspended from four points. The usual Columbia automatic contacts are used on the tray, simplifying the work of loading and unloading batteries.

The controller is of the standard Columbia vertical pattern, giving four speeds forward, an electric brake and three reverse speeds. The electric brake works on all four wheels and thus prevents skidding.

A powerful foot-operated expanding brake works directly on the rear wheel sprockets. This is a wood-faced brake, arranged for easy adjustment to wear.

The largest solid tires made are used, and as power is applied equally to all four wheels not only is the driving strain per tire reduced 50 per cent, but the actual weight carried per tire is greatly reduced, inasmuch as only 50 per cent of the total weight of the truck need be supported on each axle, whereas with the two-motor drive from 60 to 70 per cent of the weight must be carried by the driving axle.

This truck is especially designed for heavy traffic in crowded centres. The fact that it can be swung entirely around in its own length, in from five to ten seconds does away with all the backing and filling which has proved so tedious to operators of heavy hand steered trucks and which involves great wear on tires and mechanism. The four-wheel drive reduces the dead load per tire and cuts the driving strain in half; it also reduces liability to skid and greatly simplifies control of the vehicle under a heavy load. The matter of accessibility has been carefully attended to, and all working parts, including motor commutators and bearings, can quickly be gotten at for cleaning and oiling, adjustment and repairs.

The Electric Vehicle Co. has several orders on hand for these new vehicles, two of which have been completed.

### Fifteen Cars Every Day.

A complete car turned out every fifteen minutes—forty cars a day—such is the staggering midseason output of the Olds Co. It almost passes belief, yet is sober fact. The big plants at Detroit and Lansing are working at high pressure, and have at last reached the point where results are nearly commensurate both with the expectations formed and the existing demand.

### A White and Gold Peerless.

An artistically finished Peerless car was shipped to Bankers Bros., Philadelphia, last week. It was in pure white, with gold decorations, and light red leather cushions. It was one of the 16 horsepower models.

### Wilmot Opens a Garage.

A garage and repair station has been opened at Fall River, Mass., by W. D. Wilmot, a well known cycle dealer of that city. He will also handle the Cadillac car.

## STEEL SPEEDWAY PLAN

### A Depressed, Double Track Road From Long Island City to Montauk, the Latest Subject.

Again the subject of a special road without speed restrictions exclusively for automobiles is being seriously discussed. This time it is a steel road built of plates similar to those laid on Murray street, New York, by the Automobile Club last fall. The executive committee of the National Association of Automobile Manufacturers has been interested in the subject, and plans are being discussed for putting the project into some sort of practical shape.

The new plan calls for a road 112 miles long and forty feet wide, extending from the Long Island City terminal of the new bridge from Manhattan across Blackwell's Island to Montauk Point. It is estimated that such a road, with a double steel track, can be laid for \$15,000 a mile, after the right of way has been secured. George H. Day, president of the Association of Licensed Automobile Manufacturers, makes the very pertinent suggestion that such a road would be much used as a quick route from New York to Newport, the trip to Montauk taking two hours by automobile and then by fast boat two hours more to Newport.

It is thought that there will be no difficulty in financing the project, but there will be a great deal of work to be done in order to get all the necessary rights of way and legislative sanction. General Roy Stone says that if the manufacturers and clubmen do not take up the matter in a practical way he will go ahead himself and organize a company to build it as a business investment. He thinks that as a toll road it would pay handsome dividends.

The plans for a speedway on Long Island, which were said a year ago would be carried out by a company of Automobile Club members, General Stone says, are still merely plans toward the execution of which nothing is being done.

The project originated with General Roy Stone, and it was first aired by his writing the following letter to the National Association of Automobile Manufacturers:

"The unfortunate result of the late motor race adds another reason for the speedy development of special roads for automobiles; it will naturally put an end to road racing everywhere and destroy one of the important incentives to an extended use of the machines.

"There were reasons enough before for special roads, and, in fact, the sport and industry can never attain their proper development without them.

"Apparently, the place best adapted to such a road at present is the backbone of Long Island, and a little systematic work ought to develop a project for a road in that locality which would probably result in its being constructed.

"Quoting from one of my addresses on the subject:

"An ideal motor road would be a wheel-way like that in Murray street—the roadbed nearly flat, with no ditches and only shallow grass gutters, and with the space between and outside the plates well laid down in grass.

"On such a road there will be no dust or mud; no glare from sunlight, no reflected heat; while the road will suffer no wash from rains and no wear of any kind; and if it were bordered with stout hedges, no serious accident could be possible to any motor, even if its control were lost. It will be like driving over a fine lawn, except that the lower required will be very trifling."

"I shall be glad to present this subject to your executive committee in person, and if it seems important enough to them, to have them take steps to raise a small fund for the exploration of the route, and a general study of the plan of construction and operation, of the traffic to be expected, and the legislation required.

"A few thousand dollars (to be expended by a committee of the donors) would be sufficient to put the project in shape to commend itself to the many associations and individuals who would be interested.

"I will send you a sketch of the road as it appears to my imagination. I am fully assured that, even as to first cost, a steel road will be cheaper than a stone road on Long Island, while its maintenance will be as nothing. I propose hereafter to have the rails rolled with slight depressions or indentations to prevent the slipping of tires, and, perhaps, to make the plates somewhat wider than those on Murray street.

"If your association should decide to take the matter up, I shall be glad to give it some personal attention on my return from Europe in July.

"Such a road as this, straight away for 100 miles or more, would be the race course of the world, while it would develop Long Island beyond all calculation.

"The road should approach as closely as possible to Fifty-ninth street bridge, and it would probably pay to extend it to Montauk Point.

"The road should be kept free from grade crossings. It will necessarily be a toll road."

In a postscript to his letter General Stone stated that while rails such as described would come within the scope of one of his patents, he would not exact any royalty.

In response to a request for further details, General Stone submitted the following concerning the route, the operation and advantages of such a road:

"Starting from the eastern landing of the Blackwell's Island Bridge, near the Court House in Long Island City, the line could be run between Jackson avenue and the Long Island Railroad as a sunken, enclosed road, which would allow full speed from the outset, and continue nearly parallel to the same avenue, following, if practicable, the right of way of the abandoned Oliver Charlick

railway to the Flushing meadows, passing beneath the North Shore Railroad and the Corona electric road at the point where they descend upon the meadows; thence across the meadows along the line of the old Long Island Central Railroad (better known as the Stewart road) and following that line through its long summit cutting to Creedmoor and Floral Park, touching there Belmont's new race course; thence across Hempstead Plains and along the southern foot of the Bethpage, Half Hollow, Brentwood, Ronkonkoma, Coram and Dix's hills, keeping the middle line of the island between the heights and the plain, as far as the heights extend, and then straight through the level pine woods to Good Ground and so on to Montauk.

"The motorway should have a double track of steel plates, each track about five feet between centres, with ten feet space between the tracks and the same outside, making the whole roadway forty feet wide. Outside of this would be the hedges and a wire netting fence to keep out animals, large and small, and beyond that a row of trees on each side. All highways should be carried over the motorway by raising them, perhaps five feet, and depressing the motorway to the same extent.

"The entrances to the motorway would be by gates from the important highways, and these would naturally be the toll gates.

"Between midnight and morning the road could be used for motor freight vehicles for the farm and garden traffic.

"When used for formal races all other traffic could be shut off.

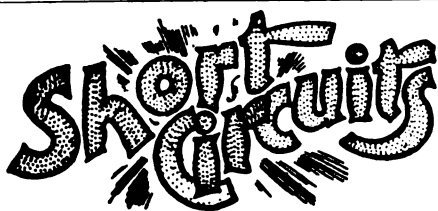
"For the benefit of those not owning motor carriages or trucks, motor coaches could be licensed to run at a low rate of fare.

"Hotels at the terminus and inns at the toll gates would soon accommodate and attract travel.

"The cost of operation would be the taking of tolls and the care of the grass and hedges, little or no repairs being required for many years.

"Assuming, for a venture, that the local motor carriage, coach and truck traffic of the island would pay these expenses, and that the 5,000 motor carriages in New York would average a trip over the line every three months, at a toll of three cents per mile, the net earnings would be \$134,400 per annum, without considering the regular summer motor travel from New York to the Long Island shores, nor the income from local, national and international motor racing, or the motor travel to the daily horse races at the Hempstead course, which will be brought within fifteen minutes by motor from the Fifty-ninth street bridge.

"Motor trucks, moving at twelve miles per hour, could cover eighty-four miles between 12 o'clock midnight and 7 o'clock in the morning. This would extend the available garden district of the island to double its present length, and, counting a width of five miles, would lead to the clearing, fertilizing and cultivation of 200 square miles of land now barren."



There are now some twenty automobile owners in Manchester, N. H., and steps are being taken to organize a club.

There are more than two hundred Oldsmobiles in use in Essex County, N. J., according to the Newark Sunday Call.

E. H. Moulton, jr., No. 316 Fourth avenue, South Minneapolis, Minn., has opened a garage. He will sell Peerless and Cleveland cars.

The Diamond Automobile Co., Wilmington, Del., has opened a garage and salesroom. Especial attention is given to the Oldsmobile, which the concern handles in Wilmington.

The Cadillac cars are going very well in Columbus, O. Oscar S. Lear, the local agent, recently delivered four in one day, part of a carload that had just been received.

One of the new Packard four cylinder cars has been received at the New York branch of the Packard Motor Car Co., and shipments of others are expected at an early date.

South Dakota has what are claimed to be the finest natural, or "dirt," roads in the world. They are worn smooth and hard by the traffic, and make splendid automobile roads.

The Bluffs City Automobile Club, of Elgin, Ill., has been incorporated, its stated object being "social." The incorporators are L. C. Becklinger, John W. Dame and William F. McCarthy.

Mr. Stead, who was one of the severely injured competitors in the Paris-Madrid race, has improved sufficiently to be moved from Libourne to Paris. He is expected to recover completely.

The American Automobile Association has begun its proposed active campaign by sending out application blanks for individual membership to all clubs, and urging active personal work in recruiting.

The Duke of Manchester has written to the Automobile Club of France offering its members the use of his castles at Tandragee and Kylemore, Ireland, during the international auto races next month.

Lorraine Barrow, who swerved his machine to avoid a dog near Libourne in the Paris-Madrid race on May 24, and upset his car, died in the hospital at Libourne on June 13, where he had been since the accident.

Pittsburg motorists are talking of securing a clubhouse. Reuben Miller, jr., W. L. Elkins and G. W. Hallman constitute a committee of the Pittsburg Automobile Club appointed for the purpose of looking into the matter.

An order has been issued by the Omaha, Neb., Chief of Police, directing policemen to "stop and arrest all automobilists proceeding faster than the ordinary gait of a horse, or more rapidly than they could stop their machines at short notice."

A garage and repair shop has been established at No. 205 North Washington street, Peoria, Ill., by the Peoria Motor Coach Co. The concern will make a specialty of difficult work, and the shop has been stocked with up to date machinery with that purpose in view.

A Minneapolis, Minn., man has been amusing himself by stringing heavy wires to trees on Summit and other streets as traps for automobiles. The police have been aroused, after several narrow escapes were reported, but so far have been unable to locate the miscreant.

An ordinance just passed by the Davenport (Iowa) Council provides that automobiles must not be driven over the streets of the city at a higher rate of speed than twelve miles an hour, and that a danger signal must be sounded at the approach of every street crossing.

M. Julian Teza, one of the editors of L'Auto, of Paris, was arrested on Riverside Drive, New York, last Saturday, charged with undue speeding. Being unable to furnish real estate security for bail, he was locked up over night, but was released on Sunday under bond of \$100 for trial.

Harlan W. Whipple, of the race committee of the Automobile Club, left New York last Saturday for a two months' tour through New England. He went first to Boston, and then to Williamstown, to attend the commencement exercises at the college there on the fifteenth anniversary of his graduation.

It is asserted that the Grim law is hurting the sale of automobiles in Pittsburg. Prospective purchasers made it a point to examine the provisions of the measure, and then declared that compliance therewith would be so burdensome and vexatious that they preferred not to become motorists.

Starting from Boston, Mass., Horace S. Sears, of that city, is now on the last stages of a tour that will total more than 1,200 miles. He drove direct to Buffalo and Niagara Falls, then went to Erie, Pa., and is now working his way across Pennsylvania to this city. He will go to Boston from here.

"While we are condemning reckless automobilists let us not forget that there are

reckless drivers and riders of horses who also run over people. That many more people are not killed by having horses driven over them is chiefly due to the fact that the average horse has more sense than the average driver," sensibly remarks the Chicago Inter Ocean.

R. H. C. Brock and party, of Philadelphia, en route to the Pacific Coast, have encountered bad going through Ohio. They passed through Toledo last week with their Winton touring car covered with mud. After making a few adjustments to the automobile at the headquarters of the Toledo Motor Carriage Co. they resumed their journey.

The first automobile races to be heard of south of Mason and Dixon's line are to be held at Montgomery Park, Memphis, on June 25. The meet will be under the auspices of the ladies of St. Luke's Guild, Idlewild, and the proceeds will go to the charity work of that organization. It will be pre-eminently a social affair, and one race will be solely for competition by ladies.

Two ordinances affecting automobiles were introduced in the Nashua (N. H.) Council last week. The first was a resolution that required automobiles, motorcycles and all self-propelled vehicles to carry lamps. The second was one limiting the speed of bicycles and all self-propelled vehicles in the compact part of the city to six miles an hour, and it was read twice and laid over under the rules.

There is not a scintilla of superstition about L. F. Dow, a St. Paul, Minn., motorist. When license No. 13 was given to him he hailed it as an omen of good luck. He says that the number is a positive protection against accidents. Superstitious teamsters get out of the way when they see No. 13 coming, other chauffeurs give him a wide berth, children scamper, and even the policemen climb to the curbing when he appears.

The committee on steel roads of the Automobile Club has decided not to do anything more in the way of demonstration work along this line. Of the mile of steel rails given to the club by C. M. Schwab, 440 feet has been laid on Murray street, 200 feet has been given to the Dock Department for use at the foot of Canal street, and the rest has been donated to the government for the laying of an experimental strip of half a mile on the Alexandria road outside of Washing-

#### One Day for Rest.

It is well to remember that in the case of large high powered cars that run every day of the week, one day should be set aside solely for the purposes of adjusting the engine, general overhauling, etc. If this plan were always adhered to there would not be so many cars drawn up by the roadside having trivial adjustments effected.

**Winton Praises the Cup Course.**

Upon arriving in England last week Messrs. Alexander Winton and Percy Owen lost no time in proceeding to the scene of the Bennett Cup race. The starting point is only about thirty miles from Dublin, and after reaching there the first section of the American cup seekers engaged quarters at the rectory, Timolin. The latter place is a little town on the easternmost leg of the course about midway between Kilcullen and Carlow.

From Timolin visits of inspection of the course are being made. On Friday last the two voyagers made the western circuit of the course, and were very favorably impressed with it.

"There could not be better roads," said Mr. Winton after the run. "They are as good as any French roads I ever saw or travelled over. There is only one difference, and that is that probably they are not quite so wide. There are no such roads in the United States."

Asked what he thought of a possible danger of the crossroads and other sharp angles of the course, he agreed with Mr. Edge and Mr. Jarrott that they did not really constitute a danger, and thought they could be negotiated at a speed of about fifteen miles an hour.

Messrs. Winton and Owen will not use their racing cars for preliminary runs over the course. As to the probability of accidents occurring, Mr. Winton said he did not

see why accidents should occur, and as for chances of the American team winning the cup, he declared they had no hopes and they had no fears.

**Acquitted and Set Free.**

So overwhelming was the evidence in their favor that Judge Parmenter, sitting in the Boston (Mass.) Municipal Court, last week set free W. A. Fuller and Victor Paget, two motorists, who were charged with having caused the death of Daniel J. Crowley, a city employe, on Columbus avenue on May 18.

It appeared in evidence that the automobile in which Fuller and Paget were riding was not going at excessive speed when the city horse was frightened, neither was the horn on the machine different from the ordinary horn, or calculated to frighten a properly broken horse. It also appeared that the young men did not run away at the time of the accident, but turned about and came back to the scene before proceeding on their trip. J. P. Sweeney, counsel for the defence, argued that no criminal carelessness of his clients had been shown.

**Gave Them Copies of the Law.**

An effective method of apprising Detroit motorists of the existence of a State law restricting speed is made use of by the Park Commissioners. They have had several hundred copies of the law printed, and whenever a motorist shows a disposition to "hit her up" he is halted by one of the Park guards and handed a copy of the law. The plan is said to work well.

**A Common Sense Measure.**

One of the most radical yet logical pieces of automobile legislation yet heard of is now proposed for Great Britain by Walter Long, president of the local government board. He is drafting a bill the main provisions of which, as he outlined them in the House of Commons last Friday, are:

First—The identification of automobiles by numbers.

Second—Full and undivided responsibility to rest on the owner of the machine for any injury or inconvenience to the public.

Third—Subject to this responsibility the abolition of the speed limit and the substitution of the same rules that apply to ordinary traffic.

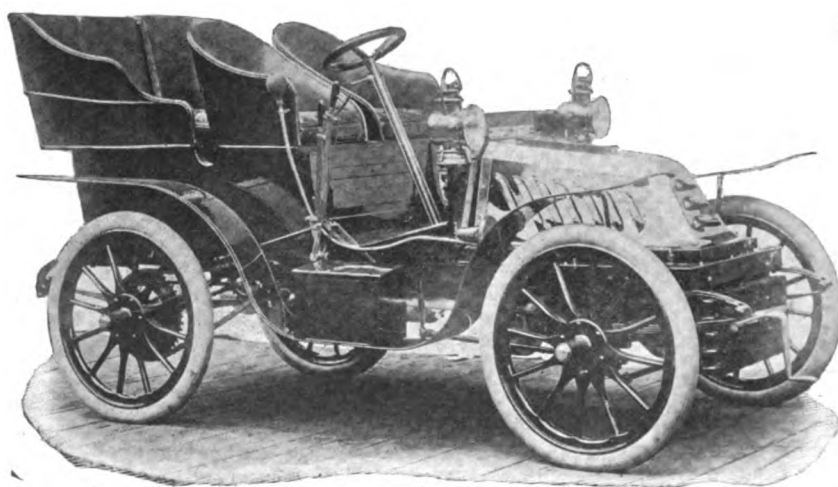
The measure, as outlined by Mr. Long, seems to meet the approval of automobilists. Mr. Long explained that the present regulation, limiting speed to twelve miles an hour, was not justified in logic nor observed in practice. A speed of twelve miles in a crowded place or around a corner might prove more dangerous to life and limb than a pace of thirty miles on the open road. After Mr. Long's explanation a private member, who had started the debate by complaining of the apathy of the government in regulating what he called "that snorting engine of destruction," withdrew his amendment.

There are more than fifty automobiles owned in Aberdeen, S. D.

# REBER MOTOR CAR

"AS GOOD AS MONEY CAN BUY."

**TYPE IV.  
Model A.**



**PRICE  
\$1800.**

12 H. P. DOUBLE CYLINDER VERTICAL.

Agents wanted in unoccupied Territory.

Write for Catalogue giving full particulars.

**ACME MOTOR CAR CO.,**

**Reading, Penna.**



## ECONOMICAL LUBRICATION

**Temperature is a Factor of Importance; Also the Amount of Work Performed.**

It must never be forgotten that, even for two engines of identical size and make, there exists no arbitrary standard of the amount of lubrication required. This depends essentially upon two factors: First, the work performed by the engine, and, second, the efficiency of cooling. With regard to the first factor, generally speaking, less oil is required on a smooth, level, dry road than on a rough, hilly one, this being dependent on the fact that less mixture is used, less heat is generated, and less oil, therefore, consumed in the former than in the latter case. But the variation required is never great.

The aspect of the subject from the point of view of the efficiency of cooling is especially important to drivers of air cooled engines and those cooled on the thermo-siphon system ("natural" circulation). Air cooled engines which are in a favorable position for cooling use up far less oil than those less fortunately placed. Again, taking two engines of identical make and size, one cooled by pump, the other by natural circulation, the former will require almost double the amount of lubricating oil of the latter.

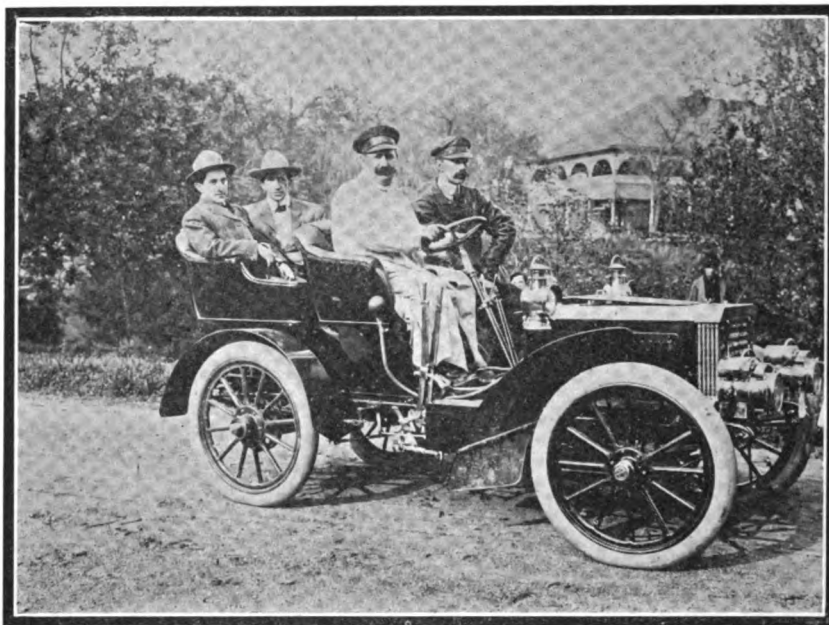
It is an excellent practice for the owner of a new car to also swamp his engine with oil until the plug becomes foul, utilizing the spark gap to obtain regular firing. He should then gradually reduce the quantity of oil until a point is reached when the plug no longer becomes foul. The ideal lubrication point for ordinary conditions of work has then been found—that is, the point at which the engine is taking all possible oil without danger of sooty deposit on the valves, piston or plug. But it must be remembered that for maximum efficiency, the amount of oil supplied to the engine should vary somewhat, as already stated, in proportion to the work. Some makers prefer to recommend some particular brand of oil for their engines, and their advice should always be followed. Should trouble be caused on the road by fouling of the plug through excessive lubrication and no spark gap fitting is handy, the excess of oil must be burned out of the cylinder. This is done as follows: The inlet valve or the plug (preferably both) are removed, and a few drops of gasoline are poured into the cylinder, a light being then applied. The cylinder should be allowed to cool before pouring in the gasoline. Of course, such a procedure requires great care, or a conflagration may result.

Never run an engine without oil. If the supply gives out on the road, get any kind that is obtainable; even salad oil will do, in

lieu of anything better. Finally, it may be stated that it is better to over than to under lubricate.

### The Fun Makers' Peerless.

Theatrical folk take naturally to the automobile. Perhaps the artificial life in front of the footlights enhances the charm of the motor vehicle and causes a steadily increasing use of it. The Peerless car here shown contains Weber and Fields, the distinguished gentlemen who provide amusement for many thousands of people in this and other cities. They may not be easy to recognize in their natural makeup, but they are indubitably the



A WEBER-FIELDS CAR.

famous music hall artists, the knight of the camera catching them as they appeared on the streets of Omaha during a recent visit.

### Chany Challenged and Won.

Claims advanced regarding the speed and practicability of their pet cars led A. Chany and J. S. Cox, of the Chany Automobile Co., Terre Haute, Ind., to make a friendly match race last week. Chany challenged Cox to run to Rockville, twenty-nine miles north of Terre Haute, and a small wager was posted to make the match interesting. The start was made at 1 o'clock in the afternoon, and Chany, in his Rambler car, reached Rockville in one hour and twenty minutes, beating Cox, who occupied the operating seat of his Packard, by twenty-seven minutes. Five miles out of Rockville a bad mudhole was encountered, and both cars stuck in it. Chany's car was pried out, while Cox's was hauled out by a team of horses. With this exception the run was without incident.

### Lowell's Growing Motor Population.

It is estimated that three hundred automobiles are owned in Lowell, Mass., with the prospect of 50 per cent additional being purchased during the year.

## SANDUSKY'S ORDINANCE

**Bears all of the Usual Earmarks, Except the Stop-on-Signal Section.**

An automobile ordinance was introduced in the Sandusky (O.) Council last week, and is likely to become a law. It provides, first, that the owner of every such vehicle shall register his name and address with the proper city official, and that he shall then be given a permit to operate an automobile. This does not apply to strangers who use

their machines in the city less than two days. Second, no owner or driver of such vehicle shall run it at a greater speed than eight miles an hour over any street of the city. Third, each machine running after night shall carry a light on each side. Fourth, each machine, running in daytime, shall carry a bell or horn, which shall be sounded on approaching street crossings or other places where a warning is necessary. Fifth, drivers of machines shall observe the usual "law of the road," turning to the right to pass vehicles going in the opposite direction, and to the left to pass those going in the same direction. A fine of \$100 is provided for violation of the ordinance.

### 'Bus Line to Nahant.

An automobile 'bus line is to be operated between Lynn and Nahant, a Massachusetts North Shore resort. Heretofore barges and horse drawn vehicles were the only means of transportation between the resort and the mainland, the wealthy residents having always prevented the establishment of a trolley line. The 'bus line will be privately operated, and an electric road is again talked of in consequence.

## WHAT MAXIM SEES

### Well Known Designer Forecasts Future of the Business Self-Propelled Vehicle.

An interested observer of the recent commercial vehicle contest in this city was H. P. Maxim, formerly of Hartford, but now of Pittsburg. He was particularly anxious to note the work of the big trucks in the downtown traffic, and on one of the days followed them in an automobile, keeping "tab" on their work.

Mr. Maxim is now devoting his time largely to work in connection with business vehicles, and he recently expressed himself thus on the subject:

"I have not the slightest doubt that inside of three years we will see the building of business motor wagons and trucks one of the largest businesses in the country. I always look at it as another case of 'pressee steel car.' The demand for motor propelled trucks and wagons must develop just as much of an industry as has the demand for steel cars, if not a greater one. There will be many more wagons and trucks wanted than there are cars, and as the running gear frame part of the work will be quite familiar I look to see it handled along very much similar lines.

"The majority of merchandise hauled by freight cars has to be at least once, and quite often twice, handled by wagons. It must be hauled to the cars in many cases, and must be hauled from the cars in the majority of cases.

"One of my clients is an interesting example of this. He sells coal. It requires 175 horse trucks to handle what he has to deliver. He sells his coal in New York City, where large yards and railroad facilities would be prohibitively costly. He is, therefore, located in one of the cities reached from New York by ferry, where space is not as expensive. He does not have to haul his coal from the cars, but he has to haul every pound from his yards to his customers, and this amounts to 1,200 tons a day. The march of progress has made the horse entirely out of the going for this, and he is installing motor propelled coal wagons.

"I could mention many similar cases, including such things as the delivery of milk in the large cities, the transportation of fruit and express matter, the distribution of kerosene oil and of bread and rolls by large bakers. In every case the wagon has to be used to complete the work done by the freight car. It is a natural consequence of transportation by rail, and therefore, I say, the building of motor business vehicles cannot help becoming equal to, if not greater than, the building of modern freight cars."

### Blue Book for 1903.

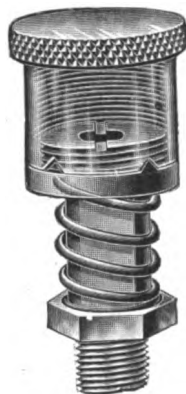
The 1903 edition of the Official Automobile Book has made its appearance. It is an attractive publication of nearly four hun-

dred pages, with blue flexible leather covers, of an oblong shape and convenient to carry in a coat pocket.

A mass of information of value to motorists is contained in the book. This includes custom regulations and duties, State laws, lists of automobile clubs and associations, lists of repair and supply stations, and a large number of routes, mostly in the New England and Middle States.

### Bowen's New Grease Cup.

Among the number of automobile specialties produced by the Bowen Mfg. Co., Auburn, N. Y., the new ratchet grease cup illustrated is worthy of special attention. It is fitted with a cup that cannot lose its cap,



this being held in place by a spring ratchet, which locks at each quarter turn. The grease cup is made in two sizes, viz., 1-inch and 1½-inch diameter, made of solid brass and furnished in either polished brass or nickel plate finish. It is peculiarly suited for use on steering knuckles, axles and engines, and will positively feed grease to the various bearings which it is desired to lubricate.

### Modern Garage for Savannah.

In order to accommodate his increasing business Thomas A. Bryson, Savannah, Ga., has arranged to build a three story warehouse and storage room immediately back of his present quarters. Plans have been drawn for this work, and the structure, which is to cost about \$10,000, will be started at once. It will be 30 by 90 feet, outside measurements, with cellar and three floors. Elevators and other modern improvements will be put in, and with this increased storage space he will not only be able to take care of more automobiles, but can carry a larger stock.

### White's Busy Day.

Nashville, Tenn., was one of the first Southern cities to take kindly to the automobile, and a considerable number are in use, with many additions being received. Last week Harry A. White, one of the leading dealers, received a carload of Oldsmobiles, making the second one this season. All of the cars it contained were sold except two, and inquiries had been made for them.

## INTENSICATOR'S DUTIES

### Diagnoses all the Troubles of the Ignition System—Is in Plain Sight.

An outcome of the numerous spark gap devices is the "Intensicator," which a British concern has recently put on the market. The device is adapted to be fixed to the dashboard or any convenient part of an automobile for intensifying the spark, and also indicating whether the electric ignition of an internal combustion motor is working correctly.

When placed on the dash, those in charge of the car have always in sight the means of instantly localizing the cause of almost any failure in the ignition, such as: (1) short circuit or leakage, (2) damaged sparking plug, (3) faulty contact, (4) unsuitable carburation, etc. It also prevents the batteries being run down without the driver's knowledge, for as soon as they are getting low, the spark in the "Intensicator" becomes weak and intermittent.

The points of the "Intensicator," which are enclosed in a glass tube, are platinum tipped, so that they cannot cause failure through corrosion. After having screwed the "Intensicator" to the dashboard or other convenient part of the car, where it can be easily seen by the driver, the wire conveying the high tension current from the coil to the sparking plug is to be connected, first from the coil to one terminal of the device, and then by means of an extra length of wire connect the other terminal of the "Intensicator" to the sparking plug. The gap can be adjusted by means of a vulcanite handle projecting at the top.

### Combine of "Kindred" Concerns.

With a capital of \$6,000,000 half a dozen "kindred concerns" in Michigan are to be merged for the purpose of manufacturing automobiles. Lee & Porter, of Dowagiac, are engineering the deal, and the plant will be located either at Dowagiac or Buchanan. So state press dispatches from Grand Rapids.

### To Make the Cluts' Car.

A stock company to engage in the manufacture of automobiles is being organized by Oscar Cluts and C. H. Day, of Cuba, Ill. A general manufacturing and machine business will also be conducted. The capital stock is to be \$20,000, and the company will acquire from Cluts the patents on a four wheel drive.

Five Rambler cars were sold in Harvard, Wis., in one day recently, increasing the number of Rambler cars owned there to eight.

### Cutting Grass With Motor Mower.

The lawn of the Capitol at Washington is said to be the largest in the world. The grounds comprise fifty-two acres, of which about thirty are in lawn. Under the plan formerly pursued in cutting the grass it was necessary for the horse drawn machines to keep constantly at work, and even then the grass in different sections of the expanse was of such uneven height as to present a rather poor appearance.

A new motor mower covers the entire lawn in much less than a week, and the grass in all portions of the grounds is apparently of uniform height.

This novel "auto" cost the government \$1,500, and when operated eight hours a day it consumes a barrel of gasoline every four days, which makes the fuel bill approximate \$2 a day. One man operates the machine, and the new acquisition displaces, in addition to the operators of hand machines, two drivers and four horses required for the manipulation of the old style machines.

The new mower is a 15 horsepower gasoline machine, and weighs about one ton. It cuts a swath of but thirty inches compared with the thirty-six-inch swath cut by the horse machines which it has displaced, yet its capacity is more than equal to two of these lawn mowers drawn by horses. This is due, of course, largely to the higher speed at which the new grass cutter can be operated.

The greatest advantage of Uncle Sam's new acquisition is found, however, in that it does not in its operation inflict the slightest injury upon the beautiful lawns surrounding the home of the legislative branch of the government. With the old fashioned machines which were in use on the Capitol grounds prior to this year the hoofs of the horses tore up the turf in a distressing manner, particularly on the sides of the rather steep slopes approaching the Capitol Building. With the horseless mowing machine this is eliminated, and the condition of the turf is actually improved, since the new machine is a combination mower and roller, and rolls the lawn in advance of and following the passage of the swiftly revolving blades.

The motor mower is enabled to approach much closer to walls and trees than were the horse machines, and some idea of the saving of work thus effected may be gained from the fact that whereas more than a dozen men with hand machines were formerly employed in "cleaning up" after the big horse drawn machines, less than half that number are now employed.

### Connecticut Motorists Register Early.

Connecticut motorists are forehanded. Although the registration clause of the new automobile law does not become operative until July 1, nearly two hundred licenses had been issued by the Secretary of State last week.

### Louisville Club's Parade.

Nearly fifty automobiles were driven in a parade at Louisville, Ky., on Decoration Day, many of them being handsomely decorated. The participating motorists were afterward entertained at luncheon at Fountain Ferry Park by President Ira S. Barnett of the Louisville Automobile Club, who was chiefly instrumental in bringing about the parade.

The parade was a complete success, the start being made at 3:30 o'clock, and taking an hour to reach Fountain Ferry Park. A squad of mounted police led the way, followed by Ira S. Barnett, with General Castleman and George L. Danforth in the former's car, and then the band wagon, containing the 1st Regiment Band, and was followed by the press auto and the cars of T. W. Moran, J. K. Goodloe, Prince Wells, Dr. J. W. Irwin, Dr. C. Skinner, Dr. J. G. Sherrill, Charles H. Wilson, C. C. Early, Professor G. B. Overton, Dr. J. B. Bullitt, Dr. Nettleroth and Dr. T. D. Finck.

### Garage of the A. C. G. B.

The Automobile Club of Great Britain has a club garage which accommodates eight cars. Gasoline, lubricating oil, grease, carbide and waste are supplied to members at ordinary retail prices. No "tips" to employees are permitted. A timekeeper will record the goings and comings of cars; a small car is one with two seats, a large car one with three or more seats. Accumulators will be re-charged for 18 cents.



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## POINTERS FOR PAINTERS

### Economical and Expeditious Methods of Doing Jobs Most Frequently Offered

In the village paint shop to-day a job of touch up and varnish is one for which it is hard to get above \$4 for doing. And, of course, that means rigid economy. It means, also, that if the painter did not pay less rent and live more cheaply than his city brother, he would soon be in a condition to accept the policeman's slogan and "move on." But with proper facilities the painter may, even in restricted quarters, get a fair profit from the work, says the Hub.

Not much taking apart can be done with this kind of a job. Get the buggy into the shop whole, minus, say, the shafts. Then block the front and rear axle up in a part of the shop where the best light may be had. Then dust out the lining of the top and sponge off the rubber or leather, as the case may be. Clean bows and shifting rail, etc. Cushion, carpet, side curtains and storm apron remove to the platform of the runway and clean. Next wash out the inside of body. The wheels having been removed, wipe off axle arms with strips of burlaps. Clean all grease spots, using a piece of cloth saturated with turpentine dipped in a little No. 00 pumice stone to quicken the work. Rub over the body lightly with pumice and felt. This will make sure the removal of grease spots, dirt, nibs, etc., and furnish a surface upon which varnish will appear at its best. Shafts and wheels to be cleaned in proper manner.

One mistake the inexperienced in this class of work are apt to make is that of touching up too many and unnecessary places. Touch only those places actually requiring it, and then touch the spot without smearing the surrounding surface, or any least portion of it. Mix the match color to dry with a gloss sufficient to reflect more light than it absorbs. Then when dry the color will not have changed from its appearance when first applied. Arrange, if possible, to get the touching up done before the noon hour.

If the remaining parts are badly spotted and defaced, necessitating a great deal of touching up, it were the more economical way, all things considered, and especially so if the color be dark, to apply a coat of flat color, restripe and finish, rather than spend slow and tedious hours touching up, and taking the chance of having a dissatisfied customer to placate. The job touched or coated up, the painter may then begin finishing operations. First apply a thin glaze of some reliable dressing, either shop made or bought prepared for use, to top, side curtains and boot, if necessary. Next apply black color and varnish to top joints, shift-

ing rail, etc. If the dash fails to clean up properly with a rub over with a few drops of kerosene apply a dressing to it. Then with a quick drying varnish, heavy in body, varnish inside of body. Follow with finishing running parts, including shafts and wheels. Last scene of all, flow the outside of body and seat, and then vacate that immediate section of shop premises for the day. A good, quick workman will finish out one of these jobs in a day, and when all expenses are deducted, a nice balance for labor will remain.

From \$5 to \$6 can be obtained for the color and varnish job, according to locality, \$5 being the ruling price. It is practically the same job as the touch up and varnish job, one coat of color and striping parts coming in additional. In preparing the body exterior surface, if the presence of cracks be observed, omit rubbing with water and pumice stone, and sand with No. 00 sandpaper, instead. The water and the rubbing tend to enlarge and make plainer the surface textures, whereas the sanding leaves the surface in a normal condition, and the fine furrows and ridges produced by the work give the color a firm grip upon the surface. Unless the touchup job be an unusually light one as respecting the portions of surface to be touched, it will scarcely afford the profit which this one does. The matching of color is eliminated, along with the touching up, and it is simply a straight application of color throughout and whatever striping fashion decrees as necessary.

A difficult job to do, and one that is quite often unsatisfactory, is that of surfacing upon the old paint and repainting. The small jobbing shop painter often gets this class of jobs than his city brother, and they come fearfully and wonderfully grided and rutted and fissured. And the price? Well, that runs from \$8 to \$10, with a good, strong measure of work and responsibility for the money.

The main point in getting a surface over the old paint, checked and fissured, is to get it at the minimum expenditure of material. A surplus of paint over the cracked surface means an additional depth of film to tear asunder and upset the varnish coats. Whatever the material chosen for filling up the cracked surface—be it white lead or a combination of lead and some other pigment, or a new system of surfacer—the stock should be finely ground and carefully beaten up with its liquid ingredients, and it should have a capacity for striking into the cracks and pores of the old paint, after a vigorous sandpapering, and gripping fast with bulldog tenacity. And the coat or coatings should present a permanent and non-porous surface. Putty, for body surfaces, upon the first coat of paint or filler, and glaze all especially bad places. Change the color of the last coat of rough stuff a few shades from that of the other coats, thus affording a guide coat to rub by.

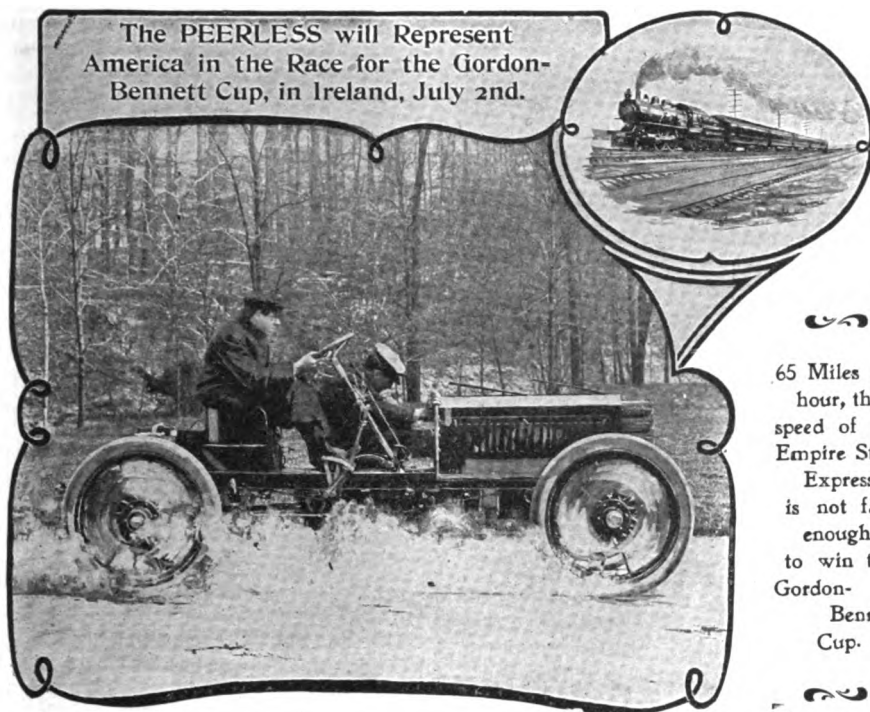
Sand the running parts of this kind of a job down close and hard, and as smooth as

can be. Whatever the surface may be—and out of a multitude the painter to-day has an easy pick—lay it on fine and clean, thus reducing to the minimum the labor of sandpapering. Putty on the first coat and apply glazing to any stretches of rough, eaty surface in need of such treatment. Aim to obtain solidity and firmness of surface with the fewest possible coats of pigment. Let the last sanding be done so cleanly and uniformly that the surface runs an even graded one throughout. Running parts over old paint should have above the surfacing coats of pigment one coat of color, one coat of color-and-varnish, at least one coat of clear rubbing varnish, this to be rubbed with water and pumice stone, and one coat of finishing varnish.

The body surface, above the rough stuff, should have one coat of color and one coat color and varnish, this to be lightly rubbed with pumice stone and water; one coat at least of practically clear rubbing varnish, and a flowed on coat of body finishing varnish. All other parts of vehicle treated in a way similar to that noted in the color and varnish job.

The burned off job, next to the entirely new one, is, after all, the most satisfactory, both to the small shop painter and to his city brother domiciled in the big, modernly equipped shop. This satisfaction arises from the fact that when the old paint is removed, or when a new, unpainted surface comes to hand, there is no uncertainty existing relative to the foundation. Grounds for speculation are put aside. The view to the finish is unobstructed. The painter feels confident that with a foundation of his own building he can make the work stand seasonably well, at any rate, and confidence at the last analysis will be found quite as important as paint or a paint brush.

To burn off paint economically a first class and strictly safe paint burner should be embraced among the shop utensils. A good naphtha lamp with a reservoir of one quart capacity, capable of easy regulation of flame, simple in its mechanism, is indispensable. Such a lamp will cost \$5. To burn off a piano buggy body and seat will require about one and one-quarter hours' work. Running parts, unless deeply ring cracked, can be surfaced over the old paint. Where such parts are burned off the most humbly situated painter should have at least \$3 for his work, and he will well earn it. In sanding the burned off surface we advise cutting down until the clean, white wood is laid bare. It has been publicly stated within the last few years that when old, badly fissured and scarred surfaces have been burned off and refinished, the outlines, down to the very minutest detail of the cracks, have presently appeared upon the new finished surface. All such instances, however, originate from incomplete or inadequate sandpapering. Strip every vestige of the old paint away until the virgin wood lays revealed, and there is small chance for old fissures to reassert themselves.



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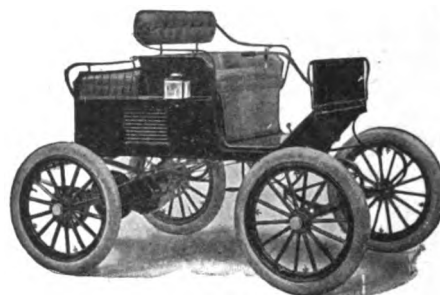
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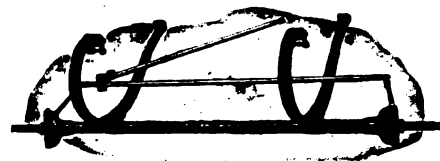
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## The Week's Patents.

729,776. Controlling Mechanism for Automobiles. Herman Lemp and Otto F. Persson, Lynn, Mass., assignors to Ellhu Thomson, Swampscott, Mass. Filed January 30, 1901. Serial No. 45,333. (No model.)

Claim—1. In a vehicle, the combination of a motor, a tubular support, a motor controlling device, a handle for actuating the device, a tube mounted within the support and connected to the controlling device, a handle attached to the tube for moving it, a steering wheel, a tube concentrically mounted within the support, a rod and lever for connecting the wheel to the last mentioned tube, a handle normally extending across the vehicle for moving the wheel, and a pivot for the last named handle, which is supported by the tube and extends transversely to the plane of movement of the handle so that the latter can be thrown upward to facilitate entering and leaving the vehicle.

729,875. Change Speed Gear. Jules Latille, Levallois-Perret, France. Filed May 31, 1902. Serial No. 109,715. (No model.)

Claim—1. A change gear, comprising a driving shaft, a sleeve longitudinally movable upon said shaft and rotatable therewith, gear members carried by said shaft, a driven shaft, gear members mounted thereon, a driven part and a coupling between said driven shaft and the driven part, substantially as described.

729,983. Internal Combustion Engine. Henning F. Wallmann, Chicago, Ill., assignor to the Wallmann Engine Company, a corporation of Illinois. Filed May 31, 1899. Serial No. 718,904. (No model.)

Claim—1. In an internal combustion engine, the combination with the crank shaft and the air and fuel pumps arranged tandem, and having their plungers connected to the crank shaft so as to reciprocate simultaneously, of the combustion cylinder having its piston connected to the crank shaft approximately forty-five degrees in advance of the plungers of the air and fuel pumps, means for opening the exhaust valve of the combustion cylinder at the end of the working stroke and for holding the same open through approximately half the compressing stroke of the air pump, whereby the combustion cylinder is exhausted and scavenged, and means for preventing the compression of fuel in the fuel pump and its delivery to the combustion cylinder until after the scavenging operation is completed, whereby air and fuel are supplied to the combustion cylinder under substantially the same pressure, and the combustible mixture is compressed in the latter through the remainder of the instroke of the working piston, all substantially as and for the purpose set forth.

729,984. Compound Internal Combustion Engine. Henning F. Wallmann, Chicago, Ill., assignor to the Wallmann Engine Company,

a corporation of Illinois. Filed October 30, 1899. Serial No. 735,301. (No model.)

Claim—1. A compound internal combustion engine, comprising a high pressure combustion cylinder, means for supplying air and fuel thereto, a low pressure expansion cylinder, means for scavenging the combustion cylinder, and means for transferring the scavenging blast, commingled with and heated by the hot expanding gases in the combustion cylinder, from the latter cylinder to the expansion cylinder, substantially as described.

729,987. Bearing. William H. Wright, Buffalo, N. Y., assignor to Mary E. Wright, Buffalo, N. Y. Filed June 17, 1901. Serial No. 64,800. (No model.)

Claim—1. A taper-roller bearing comprising a smooth, tapering inner tread provided with a roller surface inclined to the axis of the shaft so as to form an angle of repose, a smooth, tapering outer tread provided with a roller surface inclined to the axis of the shaft so as to form an angle of non-repose, the inner and outer treads providing a free race between them, and a full series of ungrooved, taper rollers fitted in the free race, held therein from endwise movement by the location of the treads with relation to each other, and having their ends out of contact with any part so as to be entirely free thereof, substantially as and for the purposes set forth.

730,056. Sparking Igniter for Explosive Engines. Charles A. Stickney, St. Paul, Minn. Filed April 11, 1900. Serial No. 12,418. (No model.)

Claim—1. A sparking igniter for explosive engines, consisting in combination of a cylinder, having a recess in one of its walls, a rock-shaft extending into said recess carrying a terminal arm, a fixed insulated terminal bolt extending into said recess, a spring for closing said terminals, an auxiliary spring plunger impinging against a lever carried by the rock-shaft to hold the terminals normally apart, an eccentric upon the engine shaft, an exhaust valve in the cylinder, a rod connecting the valve and eccentric for operating the valve, and a spring trip carried by said rod, adapted to depress the spring plunger as it is revolved forward by the rod and to spring from engagement with the plunger when reversed.

730,073. Vehicle Wheel. John M. Alderfer, Sharon Center, Ohio. Filed December 1, 1902. Serial No. 133,417. (No model.)

Claim—1. In combination with a wheel having a peripheral flange provided with a laterally extended tread projecting from opposite sides thereof, pins extending laterally from opposite sides of said flange, a tire having a split base bearing on the rim, against opposite sides of said flange, and under its laterally extended tread, and having openings through which the pins extend and detachable securing means engaging the outer sides of the split base portions of the tire and retaining the same in place on the rim, substantially as described.

730,084. Gas or Vapor Engine. Richard

A. F. Bellfuss, Lansing, Mich. Filed July 15, 1901. Serial No. 68,391. (No model.)

Claim—1. In a gas or vapor engine, the combination with a valve stem, of an exhaust valve mounted thereon, an electric circuit, a stationary member of an igniter interposed in the circuit, a movable member of the igniter interposed in the circuit and rigidly mounted on the stem, a single spring for normally retaining the exhaust valve closed, and the igniter in position to close the circuit, and means for imparting motion to the stem to unseat the valve and to operate the igniter.

730,259. Electric Sparker. Darwin Hanauer, Long Island City, N. Y., assignor to the Daimler Manufacturing Company, Long Island City, N. Y. Filed Dec. 29, 1900. Serial No. 41,446. (No model.)

Claim—1. In an electric sparker, a pair of contacts, a resilient conductor adapted to vibrate between said contacts, a revoluble shaft and a cam thereon adapted to strike said resilient conductor, said conductor being thereby vibrated so as to engage said contacts in rapid succession, substantially as and for the purpose specified.

730,307. Steam Motor Vehicle. Francis E. Stanley, Newton, Mass. Filed Nov. 5, 1902. Serial No. 130,147. (No model.)

Claim—1. The combination with the axle, compensating gear and engine of a motor vehicle, of a frame pivoted to swing about the axis of the axle and consisting of rods extending between the axle and the engine frame, and constituting a continuation of the latter, substantially as set forth.

730,345. Two Cycle Gas Engine. Avon M. Coburn, Daunt, Cal. Filed June 13, 1901. Serial No. 65,055. (No model.)

Claim—1. In a gas engine, the combination of the two oppositely disposed open ended cylinders having helical flanges or ribs to form water chambers and provided with peripherally disposed gas passages leading from a central compression chamber to the explosion chambers, a casing formed of a single length of metallic tubing having its opposite end portions shrunk upon the peripheries of the cylinders and forming the said central compression chamber at a point between the two cylinders, the casing forming one wall of the gas passages and one wall of all of the water chambers on the peripheries of said cylinders, trunk pistons in said cylinders, a crank shaft, and connecting rods extending between the pistons and the crank shaft.

730,352. Automobile. George O. Draper, Hopedale, Mass. Filed Dec. 26, 1902. Serial No. 136,525. (No model.)

Claim—1. In an automobile, a body carrying a motor and having a transversely extending seat facing the front and two longitudinally extending seats situated directly back of the first named seat, said latter seats facing outward, and foot rests for the longitudinally extending seats, said foot rests extending over and serving as mud guards for the rear wheels, the distance between the outer edges of said foot rests being no

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greater than the total width of the running gear.

730,353. Automobile. George O. Draper. Hopedale, Mass. Filed Dec. 26, 1902. Serial No. 136,526. (No model.)

Claim.—1. In an automobile, a body carrying the driving mechanism, a seat extending transversely of the body and projecting beyond the latter at its ends and across the plane of the wheels, and compartments located beneath the projecting ends of the seat.

730,421. Differential Gearing. Hugh L. Warner, Dayton, Ohio, assignor to the Dayton Motor Vehicle Co., Dayton, Ohio, a corporation of West Virginia. Filed April 7, 1902. Serial No. 101,759. (No model.)

Claim.—1. In a differential gear, the combination of two aligned shafts, two gear wheels mounted thereon, a driving member having an outer band shaped periphery, said driving member being loosely mounted between said gear wheels, face plates engaging the outer rim of each of said gear wheels and detachably secured to the outer band shaped periphery of the driving member, one or both of said face plates being provided with teeth, pinions engaging said gear wheels and projecting through openings in the driving member, said pinions being mounted between the face plates.

730,474. Pneumatic Tire. Edwin B. Rayner, Piqua, Ohio. Filed Oct. 30, 1902. Serial No. 129,456. (No model.)

Claim.—1. A pneumatic tire having its side portions thickened to form inner and outer shoulders which carry the load when the tire is deflated, substantially as set forth.

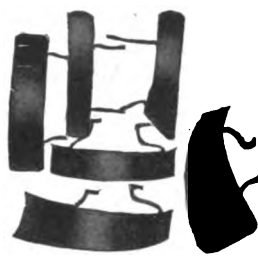
730,515. Lock for Automobiles. Benjamin D. Colby, Chicago, Ill. Filed Nov. 14, 1902. Serial No. 131,292. (No model.)

Claim.—1. In a lock for automobiles the combination of two or more members or levers for controlling the automobile or its machinery and a locking means simultaneously engaging or holding two or more of said members or levers, substantially as set forth.

730,628. Vehicle Tire. William Esty, Laconia, N. H. Filed July 13, 1901. Serial No. 68,211. (No model.)

Claim.—1. A tire composed of layers of knitted fabric united together, selvages of the layers constituting the tread of the wheel.

2. A tire composed of layers of knitted fabric united together, the stitches of the tread being looser than those at the base of the tire.



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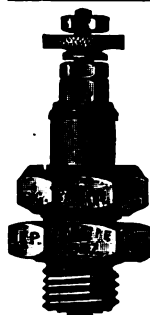
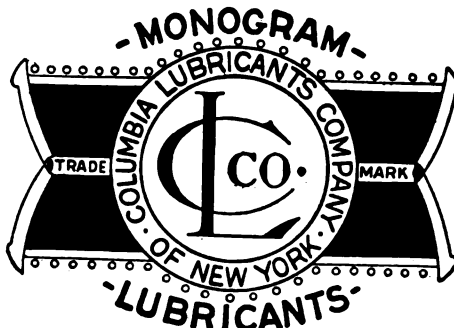
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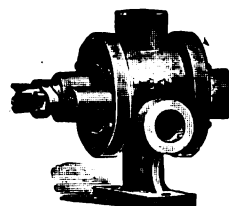
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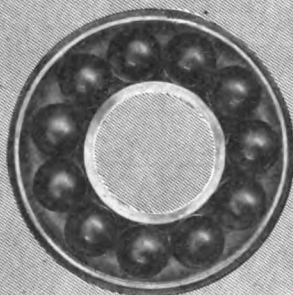
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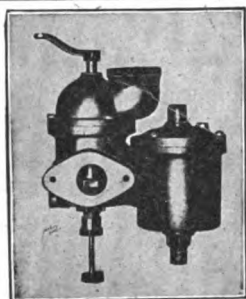
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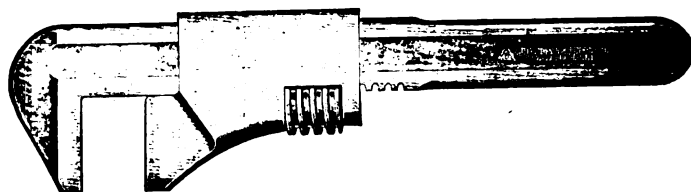
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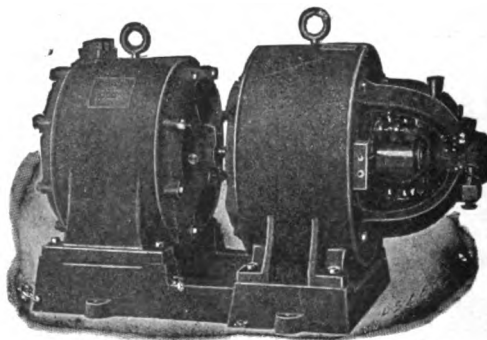
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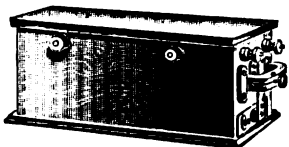
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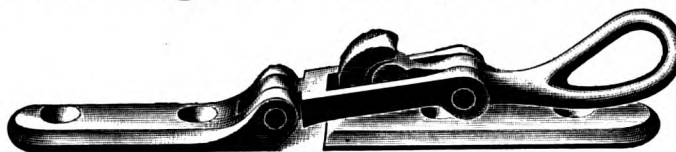
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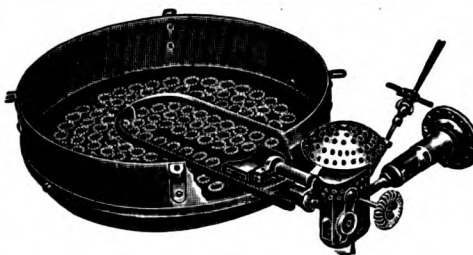


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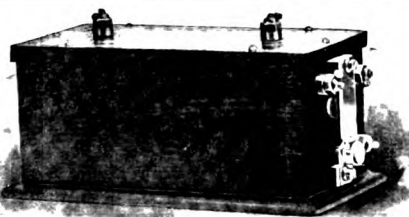
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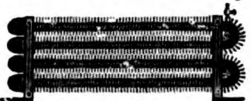
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Trap seat, complete attachments. Steam, \$30.00; all gasolene Runabouts \$25.00. Discount to Agents.

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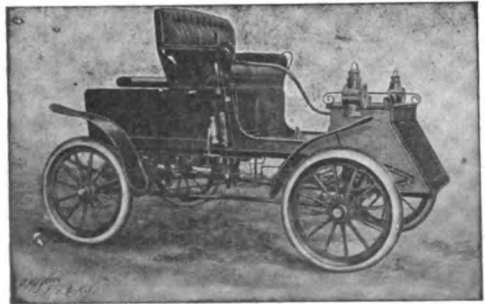
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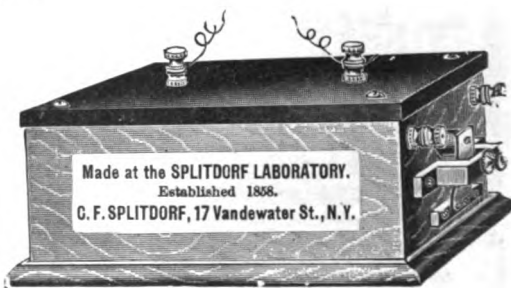
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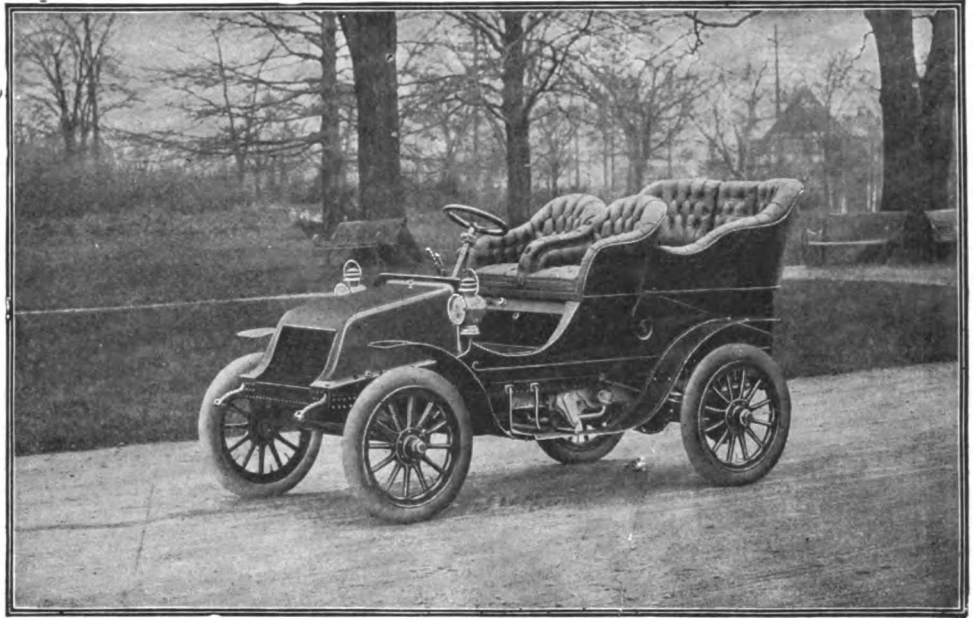


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in advising you to place your order at once if you are going to get a

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**PRICE, COMPLETE, \$2500**

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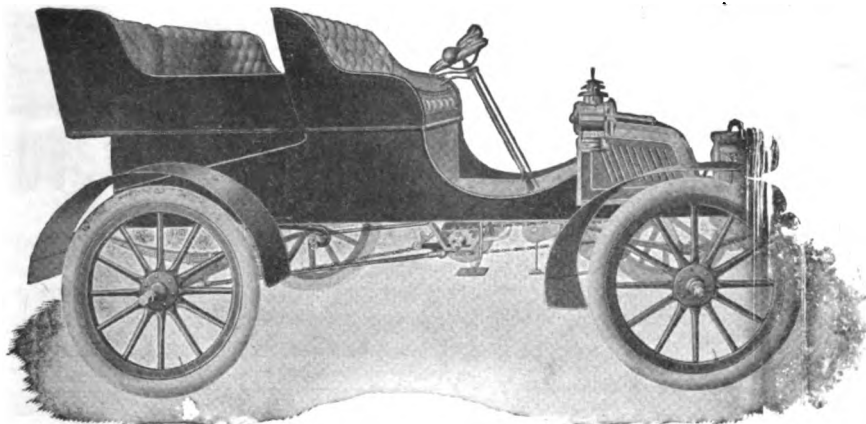
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In the **E L M O R E** with its two-cycle motor

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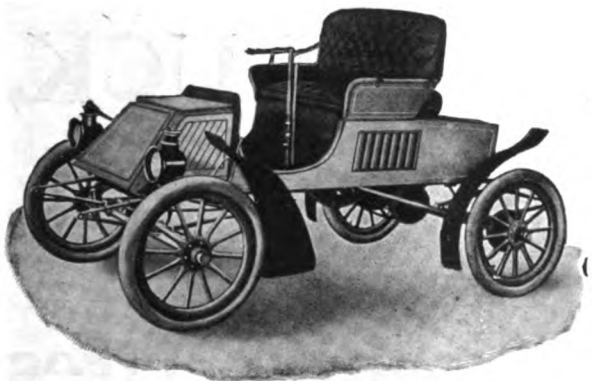
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**ALWAYS A LITTLE BETTER** is our "slogan" and the constant improvement in the



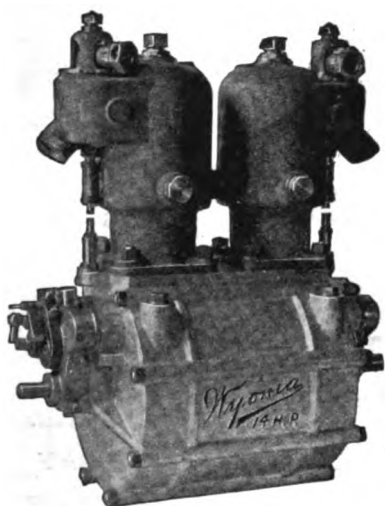
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is the best evidence of the success attained. RAMBLER horse power is actual, not estimated; practical, not theoretical and is sufficient to drive the carriage anywhere. RAMBLER construction means long life and little trouble, both good things to have. Our booklet "W" is yours for the asking; it explains the carriage thoroughly.

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P. S. The carriage sells at \$750.00 at the factory.



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Single Cylinder, 8 H. P., 135 pounds.  
Double Cylinder, 14 H. P., 265 pounds.

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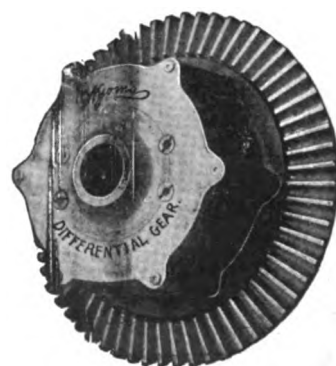
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RADIATING COILS, MUFFLERS, ALUMINUM AND BRASS  
HOODS, WOOD AND WIRE WHEELS, CARBURETTORS**

Our Motors are of French Type, Water Cooled, And Equal  
In Finish and Service to Best Foreign Makes.

The Differential Gear has Manganese Bronze Bevel Gear,  
fitted for either  $1\frac{1}{4}$ ,  $1\frac{3}{4}$ , or  $1\frac{1}{2}$  inch axles. Is made for Di-  
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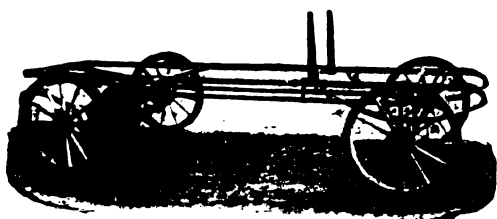
The Transmission Gear is built on a new sys-  
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Ball Thrust at each end of Shaft. Enclosed in  
Aluminum Case. Will transmit up to 20 H. P.

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8 pitch, — 60 teeth.



**TUBULAR RUNNING GEAR FOR TONNEAUS**  
80-inch Wheel Base. 54-inch Tread.



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3 Speeds forward and 1 Reverse.

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we guarantee the first, promise a large amount of the second and feel sure that the third will in no small measure be a natural sequence.

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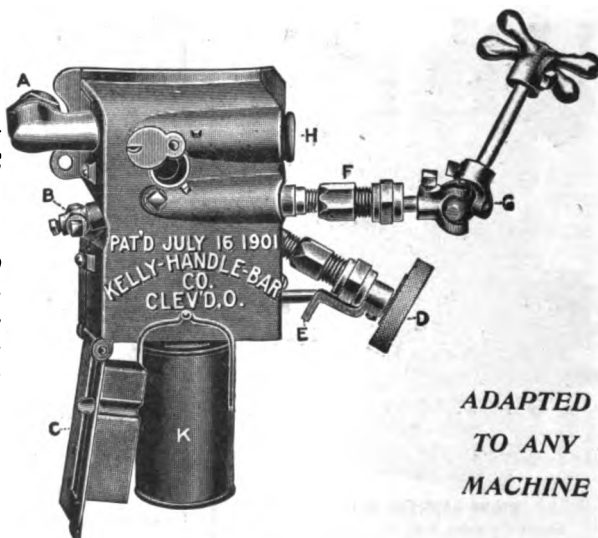
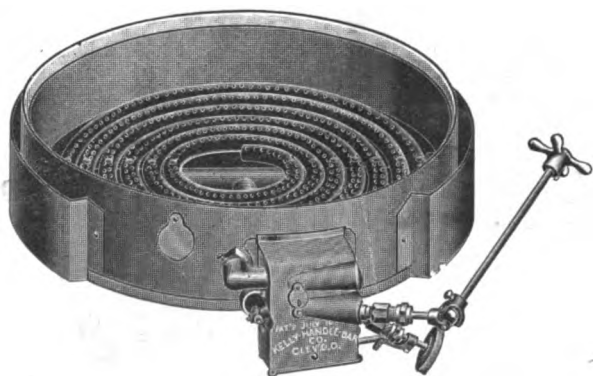
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No Steam Car is complete without one. Does away with drip cups and all annoyances. Perfected in every way and always reliable.

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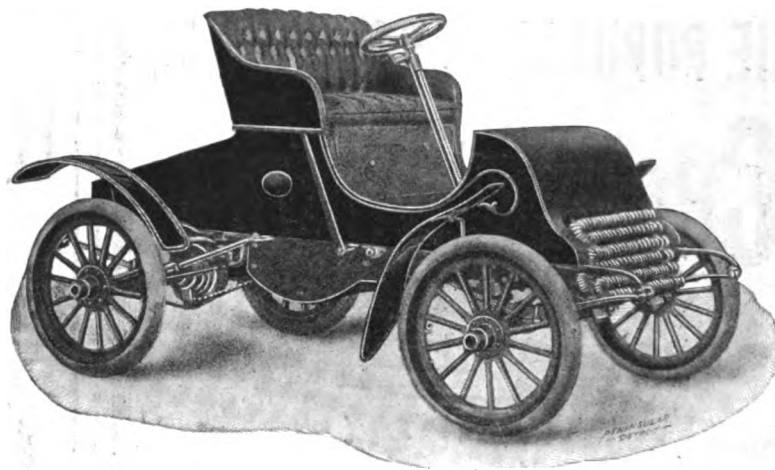
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### The New One-Piece Steel Tubular Burner

with entirely new casing. Has no gauze or holes in the bottom, the air being taken in from the ends. Absolutely eliminates all danger of fire under-lapping. As there are no air-tubes through the continuous stop-tube the burner even if red-hot cannot back fire. One of the most important improvements yet made. Thoroughly tested—as are all our products. Write for circular.

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 Good for First-Class Round Trip at Any Time  
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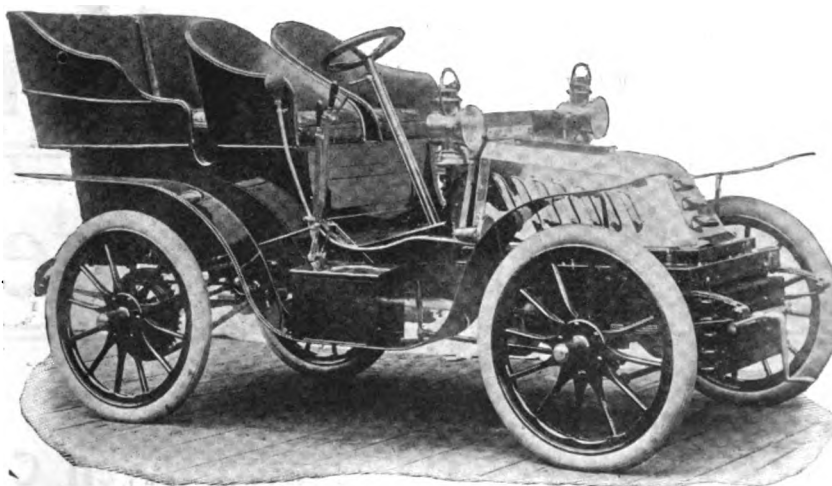
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"AS GOOD AS MONEY CAN BUY."

**TYPE IV.  
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**PRICE  
 \$1800.**

12 H. P. DOUBLE CYLINDER VERTICAL.

Agents wanted in unoccupied Territory.

Write for Catalogue giving full particulars.

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IS ACKNOWLEDGED TO BE  
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Simple control—Free from complications—  
Unequaled in construction—Will run anywhere  
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Always reliable.

BUILT ENTIRELY IN OUR OWN FACTORIES.  
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## Runabout or Touring Car

the man who makes a purchase without giving heed to  
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is closing his mind to some  
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IF YOU ARE NOT "GOING IT BLIND," WE WILL  
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# Automobile Wheels

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2	2	0 2-5
3	3	2
4	4	3 4-5
5	5	4 3-5

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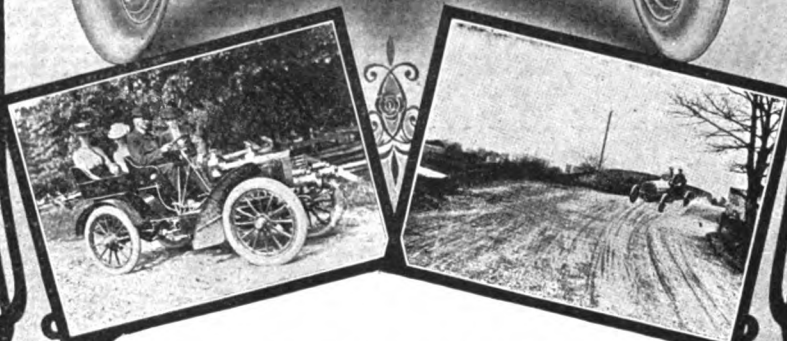
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are fast, reliable and easy to repair. They are the choice of well-posted men.

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per hour on a country road or on a prepared track, the PEERLESS can be easily guided. The quickness and accuracy with which the wheels respond to the movement of the steering wheel will give the Peerless Racer a great advantage in the race for the Gordon-Bennett Cup, for the steering gear, as well as the vertical motors, bevel gear transmission, etc., are alike in the racer and the touring car.

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**16 H. P., 2 CYLINDER, TOURING CARS  
READY FOR DELIVERY ON SHORT NOTICE**

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ORDERS TAKEN FOR AUGUST DELIVERY**

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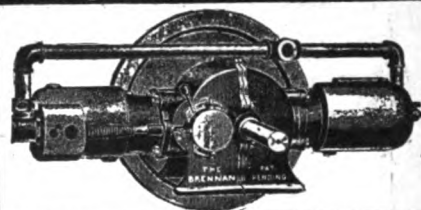
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### BRENNAN STANDARD MOTORS?

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### Motor Chain Compound.

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ARE UNEQUALED.**

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### NEXT TO FLYING

is the motion of the incomparable WHITE—smooth, noiseless and free from all motor vibrations—a swift, gliding movement that affords the maximum of automobiling pleasure, minus its every defect.

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## STUDEBAKER ELECTRIC AUTOMOBILES.

**NO EXPERT CHAUFFEUR NEEDED.**

*Can be Run Any Day in the Year, by Any Member of the Family.*



Wide Touring Radius.  
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Smooth Operation.  
Reliable Brake Control.  
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Can be used equally well over rough pavements or smooth park roads.  
Quiet Running.

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ANGIER & WHITNEY, Boston, Mass., New England Representatives for Cudell Cars.

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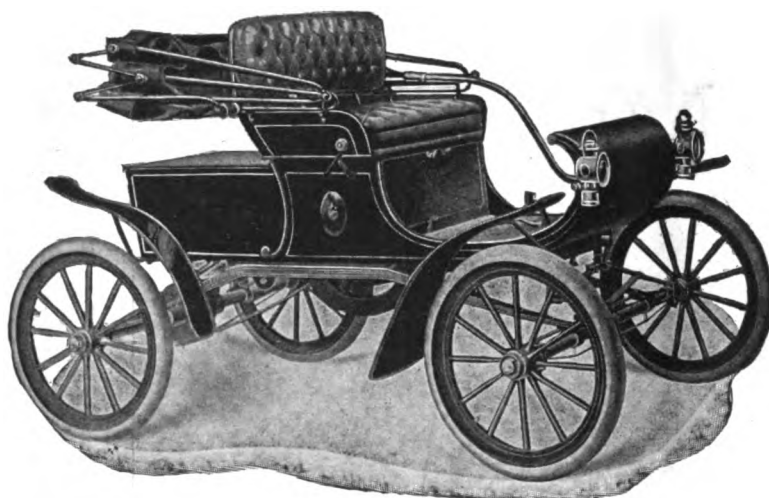
A Touring Car for those who desire the very best that money will buy.

In Certainty of Operation and Elegance of Design and Appointment it is without a peer.

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**"BUILT  
TO RUN  
AND  
DOES  
IT."**



**"NOTHING TO  
WATCH  
BUT  
THE  
ROAD."**

**PRICE, \$650**

**ONE IN THREE**

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ATLANTA, GA.—C. H. Johnson.  
BINGHAMTON, N. Y.—R. W. Whipple.  
BOSTON, MASS.—Oldsmobile Co.  
BUFFALO, N. Y.—Jaynes Automobile Co.  
CHARLESTON, S. C.—Army Cycle Co.  
CHICAGO, ILL.—Oldsmobile Co., Githens Bros. Co.  
CLEVELAND, OHIO—Oldsmobile Co.  
COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
DETROIT, MICH.—Oldsmobile Co.  
ERIE, PA.—Jacob Roth.  
GRAND RAPIDS, MICH.—Adams & Hart.  
HARRISBURG, PA.—Kline Cycle Co.  
HOUSTON, TEXAS—Hawkins Automobile & Gas Engine Works.  
INDIANAPOLIS, IND.—Fisher Automobile Co.  
JACKSONVILLE, FLA.—F. E. Gilbert.  
KANSAS CITY, MO.—E. P. Moriarity & Co.  
LANSING, MICH.—W. K. Prudden & Co.  
LOS ANGELES, CAL.—Oldsmobile Co.  
LOUISVILLE, KY.—Sutcliffe & Co.  
MEMPHIS, TENN.—H. A. White.  
MILWAUKEE, WIS.—Oldsmobile Co.

MINNEAPOLIS, MINN.—A. F. Chase & Co.  
NASHVILLE, TENN.—John W. Chester Co.  
NEWARK, N. J.—Autovehicle Co.  
NEW ORLEANS, LA.—Abbott Cycle Co.  
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OMAHA, NEB.—Olds Gas Engine Works.  
PATERSON, N. J.—F. W. Stockbridge.  
PLAINFIELD, N. J.—F. L. C. Martin Co.  
PHILADELPHIA, PA.—Oldsmobile Co.  
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RALEIGH, N. C.—Raleigh Iron Works.  
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SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.  
TEXARKANA, ARK.—J. K. Wadley.  
TUCSON, ARIZ.—Seager & Close.  
WASHINGTON, D. C.—National Capital Automobile Co.  
HAWAIIAN ISLANDS—R. N. Halstead, Honolulu.  
GREAT BRITAIN AND IRELAND—Oldsmobile Co. of Great Britain, Ltd., London, Eng.  
GERMANY—(All Germany except Cologne)—E. Ernest Weigaertner, Berlin; Cologne, L. Welter & Co.

FRANCE—Eugene Merville, Paris.  
SWITZERLAND—Automobile Fabrik Orion AG., Zurich.  
ITALY—Victor Croizat, Turin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingle & Co., Johannesburg and New York.  
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VICTORIA—Hall & Warden, Melbourne.  
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SO. AUSTRALIA—Duncan & Fraser, Adelaide.  
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ASIA MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, June 25, 1903.

No. 13

## CLUB MAY GIVE UP CONTESTS

**Is Considering Advisability of Changing Reliability Run to a Tour.**

Ever dignified and desirous of avoiding anything so vulgar as a clash of purposes, the officials of the Automobile Club of America are now considering the advisability of abandoning the proposed reliability contest of the club from New York to Montreal that was projected for the fall. The idea is not to give up entirely the run, but to avoid conflict with the National Association of Automobile Manufacturers by altering the character of the Montreal run so that it will be more in the nature of a pleasure tour than a reliability contest.

The matter is not quite settled yet, although it was announced early in the week as having been decided upon, and a daily paper quoted an official of the club as saying:

"The Automobile Club of America, in its labors to promote motoring, has conducted successfully two satisfactory reliability runs, and if the manufacturers prefer to manage the 1903 affair of this character there will be no objection whatever by the club, which does not seek the heavy task. There will be a run to Montreal, just the same, but it will be in the nature of a pleasure tour; in fact, similar to the tourist section of the Paris-Madrid. An exceptional entry is assured, and the details of the trip are now in course of preparation. The club is content to be relieved of the burden of a reliability contest."

Whoever the anonymous official was, he was not quite correct, though nearly so, for, according to J. M. Hill, chairman of the contest committee of the club:

"The statement that we will give up the reliability contest is a little premature, for we have not decided to do so, although we may so decide. We have merely talked the matter over among ourselves and weighed the advisability of so doing. It has been suggested by some of the members that we should not attempt to hold any reliability

(Continued on page 48a.)

## Panhard-Levassor to Set up Here.

Still another is to be added to the list of foreign invaders who deem it better to establish a place here to sell imported cars than to let the natives do it. The latest is M. Andre Massenat Deroche, representing Panhard et Levassor, of France. M. Deroche is now in New York looking over the field, and incidentally seeking a good location for an establishment for the sale and repair of Panhards.

The idea of the firm is that M. Deroche will be the sole agent in this country, and the only one to whom Panhards will be sold direct, although this, of course, will not prevent dealers here buying from French agents.

It is the plan of the firm to have M. Deroche carry a full assortment of Panhard parts and do as large a repair business as possible, in order that Panhards may be most properly attended to when in need of it.

## Crawhez Wins Ardennes Circuit.

In the Ardennes circuit motor race on Monday Baron de Crawhez was first, in 5 hours 52 minutes and 73.5 seconds, beating last year's time by one minute. Girardot was second, in 6 hours, 24 minutes and 29.15 seconds, and La Banond was third. W. K. Vanderbilt, Jr., was well up at the end of the first round, but he retired early in the second because of trouble with the mechanism of his car. Charles Jarrott, last year's winner, left the race owing to trouble with a tire. Only one serious accident was reported. A driver had a leg broken in a collision between two cars.

## Springfield Drop Forge Plant Acquired.

The Page-Storm Drop Forge Co., of Chicopee Falls, Mass., has leased the plant of the Springfield Drop Forging Co., in Brightwood, and will conduct it in connection with its present business. The two plants will continue practically as at present, but some improvements will probably be made in the Brightwood plant by the lessees.

## License Association Meets.

During Monday and Tuesday of this week the executive committee of the Licensed Association of Automobile Manufacturers was in session at its offices in this city. Only routine business was transacted.

## A STRUGGLE OF TITANS

**Best Cars and Drivers of Four Nations to Contest for Bennett Cup—The Course, the Cars and the Men.**

On next Thursday the blue ribbon event of automobiling is to be run. It will be the fourth annual highway race for the international challenge trophy now held by the Automobile Club of Great Britain and Ireland. It is to be run on Irish soil, between competitors representing four of the world's greatest national powers—England, France, Germany and America.

In international importance no sporting event exceeds this. It has not as yet the popular interest that has the race between the American and British yachts, but the outcome of the contest is fraught with much more consequence. The race of the motor cars reaches beyond the realm of sport into an industry that is even now a mighty lusty "infant." Its greatest interest resides in the fact that it is an industrial competition, while yet it is one of the most strenuous, grand and hazardous forms of competitive sport. Millions of dollars are invested in each of the countries represented in producing commercially the vehicles which are pitted against each other in the international race. The cars selected to represent the respective countries are supposedly the best product of the automobile industry in each. Victory in the contest means nominally the supremacy in the industry of the country represented by the victor, and actually it does carry great prestige with it.

Heretofore the race has not been a great one in the fact of bringing out great performances and furnishing keen competition, but it promises to do so this year and hereafter. It was necessary for the trophy, commonly known as the Gordon Bennett Cup, to leave France and be in the custody of some other club than the one to which it was presented, in order that a greater struggle for its possession should begin. That is



ALEXANDER WINTON.

the situation now presented. In former years the race was run as part of the journey in some longer contest which overshadowed it. The pick and flower of the greatest nations building automobiles did not compete in it. The preparations and arrangements were not elaborate, as now they are, and the cup race was what a sportsman would call a fluky sort of affair. This year there is every prospect that the race is to be the greatest ever run in any country. It probably will not witness the development of speed that the abruptly curtailed Paris-Madrid race did, nor the disaster of that unfortunate event. There is every reason to believe, however, that it will be the best and most thorough all around test of the motor cars and operators that yet has been known. The circumstances all favor this being the case. The race is to be run as an event of itself, and not as a minor part of some other affair. The course has been carefully selected, and it is generally agreed upon that it is the best one yet tried for the purpose of the race, which is to demonstrate the reliability and manageability of the cars as well as their speed, and the skill of the men operating them as well as their pluck. For the first time full teams of three men each are entered from four different countries. It is, in short, the first time that the conditions surrounding the race have promised a great contest and promised to fulfil the mission for which the trophy was offered.

The donor of the cup, James Gordon Bennett, was influenced by a desire to improve

the breed of automobiles, not only in general, but those of each country in particular. France was far in the lead in motor

vehicle construction, a lead which, in a measure, she retains to-day. To bring the art in other countries within speaking distance of that of France was the design, and the measures taken to attain it were well conceived and farsighted. The rules were drawn with exceeding care, and they have not only proved successful in bringing about the desired result, but have stood the test of time as well, and are to-day fully abreast of the industry and its needs. It was stipulated at the outset that each contesting car must be the product of the country entering it, in its every detail. From tires to motor, and from spark coil to radiator, each part must be manufactured in the land of its birth. If any country made it a practice to import certain parts, the custom must be departed from in this case or the car would be declared ineligible.

In the early cup races this clause caused no end of trouble. An English entrant was obliged to step down in 1901 when on the ground owing to its English tires having given out en route to the race and French tires substituted. Thereupon the committee of the French club very unwillingly barred it from the contest. The same year this car was obliged to use an inferior spark coil, although the best at that time attainable, while the German makers could not procure bodies in time to contest. The French team went over the course unopposed, therefore. But the lesson was well learned, and last year the English car was English built from top to toe, and it won by reason of its su-

(Continued on page 486.)



PERCY OWEN.

## NEW HAVEN INVITES

### Wants Century Company to Establish a Branch Factory in the Elm City.

The Century Motor Vehicle Co., Syracuse, N. Y., is considering an offer from the New Haven Car Register Co. to build a factory in New Haven, Conn., and manufacture the Century tourist there. The New Haven concern proposes to put \$250,000 into the company and pay royalties.

F. Coleman Boyd, vice-president and general manager of the New Haven Car Register Co., was in Syracuse last week for the purpose of interesting the Century company in a proposition whereby the company would have a factory at New Haven as well as in Syracuse. Mr. Boyd looked over the situation carefully, and is said to have offered to put \$250,000 in the business and also pay the company a royalty for the use of the patents. The corporation wishes to turn out the same car in New Haven as is made at the Syracuse factory, and a large modern factory building has been secured for the purpose.

Upon the return from the Adirondacks of Charles F. Saul, president of the Century company, there will be a meeting of the board of directors for the purpose of giving the matter careful consideration.

Whether the New Haven deal goes through or not, it is the purpose of the Century company to secure a site and build a factory this fall in Syracuse. The development of the business makes it necessary to secure larger quarters.

### The Law on Business Names.

The United States Circuit Court of Appeals for the Second Circuit, held, in the recent case of Wyckoff et al. vs. the Howe Scale Co. of 1886, that no one may be excluded from taking up whatever business he chooses by the circumstance that some one else of the same name has made a reputation in it, nor may he be required to conduct such business under an alias, although the conducting of it under his own name may produce confusion in the public mind as to the identity of goods, which no precaution or indication of his may effectually prevent, and that all that is required of him is that he shall use reasonable precautions to prevent confusion, and shall refrain from any affirmative act which may produce it. In the case of a corporation, however, the court said, the situation is different. The choice of the name is voluntary, such name is an artificial thing which can be selected by its incorporators from the entire vocabulary of names, and a body of associates who organize a corporation for manufacturing and selling a particular product are not lawfully entitled to employ as part of their corporate name the name of one of their number, when it appears that such name has been intention-

ally selected in order to compete with an established concern using the same name, engaged in similar business.

### Gallaher Leaves Mobile Co.

A decided change has been made at the headquarters of the Mobile Company of America, at Broadway and Fifty-fourth-st., New-York City. Mr. E. B. Gallaher has severed his relations with the company to interest himself in a new company to sell gasoline cars, and J. C. Walker is now the general manager of the company. W. A. Washburn, who formerly was at the factory at Tarrytown, is superintendent, and Mr. Lonsberry also has left the factory to be assistant superintendent in New-York.

An excursion in Mobile wagonettes is run daily now from the Fifth Avenue Hotel, New-York, to Phillipse Manor, Tarrytown. Two or three cars, each carrying eight persons, are filled daily for the trip.

### Sercombe at South Bend.

Parker H. Sercombe, well known in connection with a large number of bicycle and automobile schemes, is now endeavoring to interest South Bend, Ind., capitalists in a gasoline car, with the purpose of manufacturing it in that city. Matters are said to have progressed sufficiently far to announce that J. B. Birdsell, president of the Birdsell Mfg. Co., will be at the head of the company as president, and that Jacob Woolverton, president of the St. Joseph County Savings Bank, will be its treasurer. Working capital in the neighborhood of \$200,000 is said to be in view, and the South Bend Motor Vehicle Co. is suggested for the name of the proposed company.

### Four Towns Want Crawford.

Carlisle and Gettysburg, in Pennsylvania, Hager town, in Maryland, and Martinsburg, in West Virginia, are all striving to obtain the automobile works which R. S. Crawford, of the old Crawford Mfg. Co., makers of bicycles, is to establish. Martinsburg has sent a committee to confer with Mr. Crawford. It is said that the capital is furnished, no stock is for sale, that the machinery has been purchased and about all that is needed to start the enterprise is the location and buildings. A bonus, or its equivalent in buildings, is asked.

### Lester is a Benedict.

Another tradesman succumbed to Cupid's shafts last week, when H. W. Lester, the well known secretary of the Veeder Mfg. Co., became a benedict. The wedding took place at Sterling, Ill., at the home of the bride, who was Miss May B. Whipple, of that place. Mr. and Mrs. Lester will make their home in Hartford.

### The Week's Incorporations.

New York, N. Y.—Continental Caoutchouc Co., under New York laws, with \$5,000 capital. Directors—William Tischbein, Hanover, Germany; Marsell Kahler, New York, N. Y., and J. L. Kahler, Mount Vernon, N. Y.

Detroit, Mich.—Ford Motor Co., under Michigan laws, with \$150,000 capital.

## MAXIM IN ; LAW OUT

### Changes at the Electric Vehicle Plant Result in the Former's Return.

Frederick A. Law, mechanical engineer, has resigned from the Electric Vehicle Co., to take effect August 15 or sooner. Hiram Percy Maxim, late with the Westinghouse Electric & Mfg. Co., but previously with the Hartford concern, returns to that company in a similar capacity. He entered upon his duties this week.

The changes have caused no small amount of discussion in Hartford, where Law's move is said to have been due to the rumor that Maxim was to come back to the Electric Vehicle Co. Upon receiving confirmation of this rumor Law tendered his resignation, in spite of being assured that Maxim's coming would not affect him and that his continuance with the company was desired. It was last summer that Law made his connection with the Electric Vehicle Co., he having previously been in their employ, but having spent a couple of years developing a gasoline car. The rights to this car were acquired along with Law's services, and it has since been manufactured under the name of the Columbia gasoline car.

For a number of years Maxim was at the head of the Electric Vehicle Co.'s gasoline department, and designed the car which made such a good showing in the 1901 Buffalo endurance run.

### Oldsmobiles in Great Britain.

Hereafter the Locomobile Company of Great Britain, Ltd., will act as sole agent for the Oldsmobile cars in that country. It is also announced that W. M. Letts, managing director of the Locomobile Co., has resigned. He enters the firm of Charles Jarrott & Letts, Ltd., who will handle Napier and De Dietrich cars.

### Knox Again Enlarges.

An additional building, 50x110 feet and four stories high, is to be added to the plant of the Knox Automobile Co., Springfield, Mass. It will be located to the eastward of the present building, and work on it will be begun immediately.

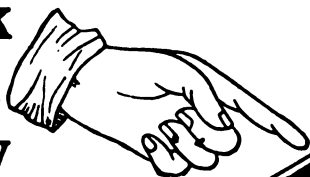
### Japs Interested in Autos.

The Japanese are opening their eyes to automobiling. Recently Messrs. Bruhl Freres, of Yokohama, distributed three thousand illustrated automobile catalogues, printed in the native language. The majority of the cars described were Yankee product.

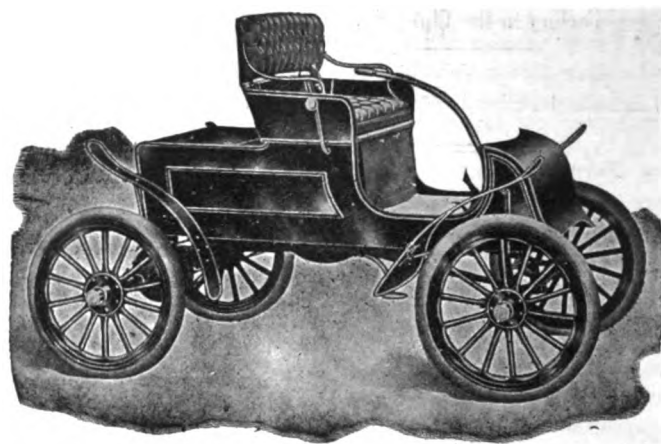
### Occupy Enlarge Quarters.

Harlan, Iowa—The Nelson Gas Engine & Automobile Co. have moved their machinery into a new and enlarged building. For some time past they have been behind orders, and increased capacity was imperative.

When you are looking for  
the best Runabout  
look  
this  
way



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NEW YORK, JUNE 25, 1903.

The Motor World acknowledges with pleasure an invitation from Messrs R. J. McCreedy and J. C. Percy, joint proprietors of the Irish Motor News, to attend the camp they will establish at The Moat, Ardsclull, near Athy, Ireland, on July 1 and 2. This is admittedly the best point of view on the entire Gordon Bennett course, the cars passing over this particular stretch of road no less than seven times. The camp is located but thirty-seven miles from Dublin, and no doubt thousands of automobilists will avail themselves of its comfort and high fun on the 1st and 2d. The Motor World will acknowledge this kind invitation through its managing editor, Mr. R. G. Betts, who sailed on the Etruria on June 20 to especially represent this paper at this great road contest.

#### May the Best Car Win.

May the best car win! and let us now brace ourselves for the news of the result of the international cup race. If the word is that America gets the cup we surely will need to be braced for the good news, for it

is to be confessed that what we hope for is not an expectation.

It is sincerely to be hoped that the best car will win the race, because it was for the purpose of demonstrating each year which nation is building the best cars that the race was instituted by the donor of the challenge cup. The conditions of progress in automobile making in the various countries have not been heretofore conducive to the successful carrying out of this purpose. France was too far in advance of the others, and the properly severe rules of the race prevented close competition until the laggards caught up. Now, however, there seems to be a better prospect than ever before for the race to be decided by the merit of the cars and the men.

In all competitive sports there are liable to be victories by "a fluke." An accident not blamable to the builder or skipper may prevent the best yacht from winning in a sailing race and an unpreventable mishap may lose the race to a horse who is really the fleetest. In automobile racing there is yet a larger likelihood of accident than in many other sports, much as we regret to admit it, but it is growing smaller so continually, this likelihood of mishap, that there is sound reason for the hope that the cup may be won in a race with the cars running at their best. It will be little glory to any country to capture the cup because all the competitors of the winner broke down, and it is to be hoped that the breakdowns will be few.

The course, the cars, the men and the arrangements for the contest all encourage the belief that this year there will be fewer cars drop out because of being crippled than in former years, and that the fourth race for the cup will mark the beginning of a new era for the contest in which it will be in fact as well as in name the blue ribbon event of the automobile world. The chances are more than ever in favor of a rousing contest and a victory through merit, and not "fluke."

With this belief and hope bracing us, we will receive with grace the news that the cup goes to France, or Germany, or remains in England, or comes here, so long as the account is one of a race in which the best car won.

So, again, may the best car win!

#### On Angels.

By "angels" we do not here mean those seraphic beings who walk invisibly with human souls. Rather do we, without disrespect or the shattering of images, refer to

the "angels" of our country, those creatures who are "good" merely and purely in the earthly sense. No doubt some broken winged bookmaker invented the term after the saturnalia of a day when all the favorites won. The peculiar pertness and patness and flippancy of the term "angel," as applied by the moderns, mark it as the child of a mournful moment. At any rate, "angel" became current coin in the vocabulary of all soldiers of fortune. Thus we have "angels" in the drama, in business, indeed wherever there is a found a man with an idea needing only money to push it there lurketh an "angel."

Here in our automobile world, to fetch the matter suddenly home, we have had "angels," and no doubt we shall continue to have them until automobilism dissolves into airshipism. Yes, these gentle beings, offspring of hope, greed and money in triple combination, will continue to break in and equally continue to break out of the automobile field. We are sincerely sorry for these "angels," so sorry, in fact, that we run the risk of being misunderstood and misjudged by speaking.

As publishers of a journal devoted to automobilism we necessarily welcome into this field all new capital, all new energy. But we don't want that capital lost; we don't want that energy wasted. New capital and new energy mean more advertising pages to us; but we want to see said advertising accounts cleanly balanced, not carried to profit and loss. And, take it as a fact, the story of our ledger, were we less careful, would be indeed a sorry story, would be a series of chapters relating how John Jones, with hope and money, doubled up with Henry Smith, said Smith possessor of a world-beating device or notion, and how their double turn, calculated to shake the automobile world to its sub-foundations, created absolutely no ripple whatsoever—that is, except in Jones's bank account, which was frightfully sweated and shrunk in their brief performance. In fact, the turn left Jones in the hands of his creditors and sent Smith back to the mechanic's bench.

Perhaps it has dawned upon you by this time that if there is any business on earth in which you must crawl before you walk—not to say run—it is this same business of making motor cars. It takes years to train a human being to learn enough to earn a living. It takes years to teach automobile capital to declare dividends. The leakage in motor-car making is tremendous—the period of experimentation an inferno, in which capt-



tal and patience disappear in equal proportion.

Some men think that \$10,000, \$20,000 or \$30,000 is a goodly sum. It is for certain purposes, say, to start a shoe shop or a sash and blind factory. But in automobile manufacture that \$10,000 to \$30,000 will just about pay your fare up to the gateway of successful and profitable marketing. It will never pass you inside, and therefore, having no more oil, you remain outside the breast-works.

And surely now it must be plain to you that we have somewhat of a contempt for the "angel" who permits himself to be drawn or shoved into the making end of automobilizing without carefulest investigation into what is and what may be, who will invest his paltry thousands without knowing that automobile manufacture has already swallowed up several hundred such fortunes, and even at that does not seem at all satiated.

And to put it much more homœopathic. The way of the motor car maker is hard. It is a far cry from the first blow of the whistle to positive net return—stuff that you can bank. The little automobile factory costs big money. The big automobile factory costs—well, you never can tell. Where the light is, there the moths are. Where there is trade activity there are the moths of trade, those fellows who become fascinated by the light, fly into it and are disfigured for life.

And in trade the light often happens to be a man who shows a baleful flame, one of that kind who have played the star part in several cloudy failures and who to themselves have said: "We must seek new fields. Ah, there's a new crowd. Let us hide there. There no one shall know, and it will be a fresh deal of the cards." Pirates these, pirates pure and simple, many of them, but without the black flag.

Dear angel! Do not think this picture over dark. We have, as a matter of fact, merely hinted. We have sketched but lightly. If you can't read between the lines, why, come behind the scenes and be disillusioned. Come behind, learn what's what, and then, if you have the necessary, start with our blessing. But don't attempt to do a man's work with a child's arm. Rather keep your little money, go away and be happy.

### The Marvel of Speed.

That Oldfield flight at Indianapolis—a mile in 59.3-5—was a marvel. Think of it—or, rather, Mr. Busyman, let us shy a few thoughts at it for you. This man Oldfield

spanned, measured, ate up a mile under 60s, and folks interested in such things are mildly interested and slightly elated. There is no pulsing of the blood, no special excitability—we are far too sated for that in these times.

Forty years ago Morse killed all wonder with his telegraph. It was the great fact of the age, and it dwarfed all other brain-tin-glers. It became the standard of comparison for that generation. Twenty years later Bell and his telephone did the same for that era. It was the miracle of its time, and it dwarfed all other uncommon and extraordinary things.

And to-day, now, 1903, the wonder working Marconi comes, and, by talking round the world, works a fine piece of necromancy and cheapens romance. And when we have digested Marconi some favorite child will startle us with some further leap forward in nature-knowledge. Yes, indeed, ever since C. C. fooled the natives with pink beads the world has been witness of a succession of miracles, discoveries and inventions, each the peerless fact of its epoch.

And thus it comes that we see a man drive the comparatively newborn automobile round a mile circular dirt track—no polished steel rails, mind you, stretching away in a bee line and billiard level—in 59.3-5 seconds; and we scarcely pause to note it, much less wonder at it. And just think what this means: Only the great steam horse, the evolution of three generations, surpasses it, and then only as an extraordinary test. And, again, stop and try to realize what such a pace means. Have you ever ridden madly over one of those level far Western railway stretches, train behind time, throttle wide open, and the telegraph poles slipping wildly, madly, drunkenly behind you—that is sixty miles an hour.

And yet, Oldfield, in an automobile, does this round a mile dirt circle. While you could say: "Look out," Oldfield has flashed over ninety feet, and ninety feet, good friends, is nearly one-half of a city block. While you would be walking that block Oldfield would be three-quarters of a mile away. While you could dine and attend one of those little empty comic operas, Oldfield, starting from the Brooklyn Bridge, would have passed far beyond Boston.

But the first illustration is, perhaps, the best. You see Oldfield coming. He is just level with you, and you say: "Great Scott!" and he is half a block off. We simply cannot realize such speed. Only the stop watch can comprehend it. And a concluding

thought—where will the 59.3-5 be when the ideal mile straight-away automobile track is built?

The Exalted People who govern the parks of Memphis, 'way down in Tennessee, have recently been very kind to the automobilists of that town. Recently it had been proposed to bar out of the parks all users of motor cars. But the Exalted Ones said: "Nay, nay. They shall go into the parks and shall maintain a pace not faster than four miles an hour." And so the slogan among Memphis motor car men these days is: "Let's go over to Overton Park and take a snooze." It is probable that this law will eventually be repealed. At the blasting pace of four miles an hour the automobilists will not run into anything, but things will assuredly run into them; so that in time the Exalted Ones may repeal the law.

The motorist owner of a two passenger car who does not at some time or other desire to carry an extra passenger or passengers is an exception to the rule and worthy of a second glance. Usually he will worry about the matter until he hits upon some solution of the problem. A removable tonneau body is the best and likewise the most expensive solution, of course. A dos-a-dos seat or an extra seat in front will do at a pinch, and is frequently made use of. But something of the kind most motorists must have, and only when they get them do they return to their wonted state of tranquillity.

A good point is made by the chairman of the contest committee of the Automobile Club when he suggests that the report of the manufacturers on the reliability of their own cars, as demonstrated in a reliability contest conducted by themselves, will be just about as influential with prospective buyers as are the claims of the various catalogues.

It certainly will be convincing at the shows to see on the cars medals awarded in the reliability contest inscribed, "Highest honors; first class; awarded by ourselves."

On Decoration Day the plain but efficient B. Oldfield put up a new mile track record, and now on Saturday last at Indianapolis he shaved his 1:01.3-5 mile down to 59.3-5, and gave the five-mile record a sound drubbing. The mile figure is noteworthy as being the first circular track mile done within the minute. Thus at the two meets already held the record table has been altered, which seems to promise an interesting season of record-breaking.

## WORLD'S RECORDS CUT

Oldfield Lowers the Figures From One to Five Miles at Indianapolis.

	New	Old	
M. record.	59%	record.	
1	59%	1:01%	Oldfield, Empire City, May 30, '93.
2	2:00%	2:12%	Winton, Cleveland, Sept. 16, '02.
3	3:02%	3:18%	Winton, Cleveland, Sept. 16, '02.
4	4:03%	4:25%	Winton, Cleveland, Sept. 16, '02.
5	5:04%	5:30%	Winton, Cleveland, Sept. 16, '02.
OLDFIELD'S SEPARATE MILES.			
1, 59%.	2, 1:00%.	3, 1:01%.	4, 1:01%.
5, 1:00%.			

There were great goings on in Indianapolis on Friday and Saturday last, when the races postponed from Decoration Day were run off. On Saturday five thousand people whooped it up while the celebrated Barney Oldfield drove his famous Ford car over the mile clay track in 59.3-5 seconds, thus creating a new one-mile record for a circular track. This occurred in the second and final heat of the five-mile race, in which event Tom Cooper and his "999" largely figured, but not enough to avoid being smothered by Oldfield. After flashing the mile in 59.3-5 and wiping off the board the old record of 1:01.3-5 made by himself at the Empire City track in New York on Decoration Day, Oldfield maintained his pace and cut the two-mile record by twelve seconds, the three miles by sixteen seconds, the four miles by over twenty seconds and the five mile record by exactly twenty-six seconds. The figures from two miles to five had been credited to Alexander Winton, and had been chalked on the board at Cleveland on September 16 of last year. Oldfield used, of course, his 80 h. p. Ford car, fitted with G. & I. tires.

Oldfield's work was, of course, the feature of the meet, though there were many other good things on the menu. The meet, which was held under the auspices of the Indianapolis Automobile Association, was fixed for Friday and Saturday, but on the first day, after three events had been run, old Jupiter Pluvius entered himself, and he had a walk-over for the rest of the day, the programme being called off. Those automobile events which were not run off on Friday were added to Saturday's programme, while the motor cycle events which were drowned out on Friday were abandoned altogether. Mayor Bookwaite officiated as a timer and much enthusiasm was shown during Saturday's races.

On Friday the track was soft, and the machines slipped badly on the turns as they made their preliminary warming up spins. Friday's summaries:

First race, five miles, machines weighing less than 1,200 pounds—Frank Moore, Indianapolis, first; H. V. Dixon, Cleveland, second; Horace Wilcox, Indianapolis, third. Time, 9:16. Moore drove Earl Kiser's Pirate II.

Second race, motor cycles, two miles, 150 class—Harry Weller, Indianapolis, first;

Harry Miles, Indianapolis, second. Time, 4:10.

Third race, five miles, 25 horsepower or under—Earl Fisher, Indianapolis, first; Elmer Apperson, Kokomo, second; Maurice Derango, New York, third. Time, 7:28.2-5.

Bright weather having ensued, the conditions were considered perfect for Saturday's sport. The noteworthy ride of Oldfield, recorded above, was the finishing heat of the five-mile Oldfield-Cooper match race. In the first heat Oldfield won in 5:17.2-5, Cooper running second in 5:24 flat. In the second heat, the one in which the record was made, Cooper finished in 5:18. Summary of the other events:

Five miles, 1,200 pounds, Class I—First, Earl Kiser, General, 8:41; second, Frank Moore, Oldsmobile, 8:42.1-5; third, Job Moore, Franklin.

Five miles, no limit to weight—First, Earl Fisher, Winton, 7:42.2-5; second, Edgar Apperson, Apperson; third, Derango, Peerless. Fisher won by nearly a quarter of a mile.

Five mile handicap—First, Apperson, 30 seconds; time, 7:48.3-5; second, Kiser, handicap, 1:05; third, Derango, handicap 40 seconds.

In a mile motor cycle race, added to the programme, Bert Corbet won in 5:08.1-5, with Harry Brandt second, in 5:15.2-5; Harry Howe, third.

## Fourth of July Meet for Columbus.

The chief topic of discussion at the last meeting of the Columbus (Ohio) A. C. was the feasibility of holding a Fourth of July meet at the local track. The proposition submitted by the Driving Park people was accepted, and the following committee on meet was appointed: Chairman, W. C. Anderson; William M. Frisbie, Dr. C. A. Howell, Oscar Lear, William Neil, Jr., and William Huston. The Winton, Baker and White people promised to show their fastest cars at the meet. At this same gathering the club roster was increased by several new members.

## Cleveland's Meet to be in September.

Dates early in September have practically been decided upon for the 1903 meet of the Cleveland Automobile Club. As was the case last year, it will be a two-day affair, and already promises from some of the most prominent racing men have been received.

## Newport to Have Races.

The Newport (Ky.) track will shortly be open for a season of horse racing extending over 140 days. And note—on Saturdays one of the six events will be a race for auto cars.

## Independence Day Race at Bellport.

The summer residents at Patchogue, Long Island—some of them—have planned to celebrate the Fourth by an automobile race at the Driving Park at Bellport.

Sacramento, Cal., reports big interest in automobilism, with recent sales to two physicians. Then follows a wail about the beastliness of the roads of Sacramento County.

## UP A SERPENTINE HILL

Pittsburg Witnesses its First Contest Amid Rain—One Contestant Wins Two Cups.

Rain again marred the pleasure anticipated in the first hill climbing contest of the Pittsburg Automobile Club, held last Saturday, but there was a large attendance of motorists and those who admire the horseless vehicle, and they were treated to a fine exhibition in spite of the slippery condition of the driveway. The course was over 2,204 feet of the serpentine drive in Highland Park. For a distance of 300 feet it was practically level, the remaining 1,904 feet having a grade of more than 6 per cent at the opening of a curve of 175 degrees, with a diameter of only 110 feet. From starting point to finish was a series of grades and curves, with a total rise of 150 feet. The test of the climbing ability of the contesting cars was as severe a one as could be devised. There were some exciting incidents, such as the occurrence of fire in the gasoline tank of W. H. Artzberger, the flames being extinguished without damage; and an involuntary coast taken by Reuben Miller in the special trial of speed which followed the regular contests. The chain of his car snapped near the end of the course and he finished with a gravity run. Another feature of the occasion was the number of protests entered.

The method adopted in the contests was admirably calculated to obviate possibilities of accident. Only one car was allowed upon the course at a time, and went over the course alone, its time being taken. There were six classes provided for, a cup being offered for the winner in each class. In addition there was a special contest, open to the two leaders in each class, the prize being the same as in the class races, there being thus seven cups in all. A. E. Masten was the fortunate winner of two of these cups, heading his class, and also making the best time recorded for any of the classes. He might possibly have won a third cup had he remained to participate in the special contest, as the prize in that event was won by A. E. Turner, who was second to him in the class race. Turner, however, bettered the time made by Masten. Both men drove Peerless cars.

The several classes were arranged as here stated: Class A, electric; Class B, steam; Class C, gasoline cars weighing less than 1,000 pounds; Class D, gasoline cars between 1,000 and 2,000 pounds; Class E, gasoline cars weighing over 2,000 pounds; Class F, special.

Thomas R. Hartley was chairman of the committee in charge of the event, the other members being Dr. John A. Hawkins and George W. Hailman. The judges were W. C. Temple, R. J. Pollard and Howard Nimick. W. H. Keech, Henry G. Wasson and W. C. Temple were timers.

Arthur L. Banker entered in Class E a

32 horsepower Peerless machine, which was ruled off on the ground that it constituted a class by itself, being distinctly a racing car. In an exhibition trial it covered the course in 1 minute 29.15 seconds. The summary of the regular contests follows:

#### CLASS A.—ELECTRICS.

A. L. Banker, Waverly.....	3:03
W. N. Murray, Studebaker.....	4:14
H. A. Marlin .....	4:18 1-5
J. F. Burke.....	4:34
T. R. Hartley.....	4:53 4-5

#### CLASS B—STEAM.

W. H. Artzberger, Foster.....	2:12 1-2
Reuben Miller, Stanley.....	2:15
Peter Hermes .....	2:48
J. McD. Mashey.....	3:44 2-5

#### CLASS C—GASOLINE, UNDER 1,000 POUNDS.

Dr. Stewart, Northern.....	3:37
Ed. House, Oldsmobile.....	3:39 4-5
J. D. Splane.....	5:17 1-5

#### CLASS D—GASOLINE, BETWEEN 1,000 AND 2,000 POUNDS.

F. T. F. Lovejoy, Pierce.....	2:29
D. H. Hostetter, Franklin.....	3:09 1-5
G. L. Hallman.....	3:27 1-5
C. H. Dixon.....	2:55 2-5

#### CLASS E—GASOLINE, OVER 2,000 POUNDS.

F. A. McCune, Darracq.....	2:21 1-5
W. L. Mellon, Autocar.....	2:26
Dr. J. A. Hawkins.....	2:40
Thomas Guffey.....	2:42 4-5
Clarence Fleming.....	2:49 3-5

#### CLASS F.

A. E. Masten, Peerless.....	2:11
A. E. Turner, Peerless.....	2:20 1-5
A. R. Neeb.....	2:30 1-5
T. R. Hartley.....	2:48 2-5

#### Days of Grace Have Expired.

On June 14, the thirty day limit set by the Bailey law for registration of automobiles and chauffeurs, expired, and the police have since then been getting more and more particular about looking at cars to see if they are carrying numbers. In Buffalo Superintendent Bull of the police formally notified the force to be on the outlook for violators of the law. The order he promulgated was,

"To-morrow we will begin enforcing the provisions of the new law so far as the registration and numbering are concerned. Owners and drivers of all motor vehicles that are not properly numbered will be interviewed and requested to produce their certificates. Upon their claiming to have made application to the Secretary of State the officer will take their names and addresses and a description of their vehicles. The officer will also ascertain whether the operator of the machine is the owner. The names so obtained will be forwarded to headquarters each day, and the Secretary of State will be communicated with to see if applications for license has really been made."

So far as known no formal order was issued to the police in New York City, but the officers began promptly to hold up cars not carrying license numbers, and warn

them about the law after inquiring into the circumstances. The drivers of the electric delivery wagons for the big department stores have been subjects of especial attention. It is rumored that next week the policy of warning will be discontinued and arrests will begin to be made.

#### Aimed Against Trailers.

A "strike" in the Connecticut Legislature that no one seems to know who is back of is dangerous as a precedent and vicious in principle. The Judiciary Committee of the Senate last week favorably reported a bill providing that "except for the transportation of agricultural machinery, no motor vehicles shall be used on any highway for the purpose of drawing or propelling other vehicles loaded with freight, merchandise or property." Street railways are exempted from the operation of the measure.

Of course, the passage of such a bill would have no immediate marked effect. There are few, if any, business automobiles drawing trailers in use, but there is no doubt there will be in the not very far distant future. Therefore the bill is both useless and vicious.

The Hartford Times hits the nail squarely on the head when it says that "the proposed law forbidding the hauling of more than one vehicle by an automobile will come up for passage in the Connecticut Senate to-morrow, and the representatives of both the farming interests and the manufacturers of the State should see that it is beaten. It was rushed through the House of Representatives without discussion. Who is behind this undefended and indefensible measure?"

#### Motor Cars on the Ferries.

A notice has been posted on the bulletin board at the Automobile Club of America to inform members that the Hoboken Ferry Co. has ceased refusing to carry automobiles containing gasoline, as was told in the Motor World several weeks ago. The notice is a formal one, printed by the ferry company, stating that the prohibition would be removed after May 15, and that automobiles carrying gasoline would thereafter be accepted at the ferry, provided any fire that they might have should be extinguished before boarding the boat and not relighted until after leaving it. The printed notice was sent to W. E. Scarritt personally by T. W. Lee, the general passenger agent, and Mr. Scarritt had it posted. The Union Ferry Co., which controls the Fulton, Wall street, South, Hamilton avenue and Catharine ferries, is the only ferrying company operating from New York City that does not carry automobiles.

#### Utica's Second Club.

Utica automobilists organized a club on the 12th, with the following officers: President, Edward Bushinger; vice-president, D. W. Smythe; secretary-treasurer, Harry Mundy; representative to the State Association, A. J. Baechle. The club is the second to be formed in that city.

#### MAY GIVE UP CONTESTS

(Continued from page 475.)

run, but, so far as the contest committee is concerned, it is just where it was two months ago, before any run under the management of the manufacturers was heard about. The governors have instructed the committee to proceed and arrange a run, and we are proceeding. If the governors say to change it to a tour, all right; we are not anxious for the work.

"I can't see for my part why the manufacturers should want to have a run of their own. The club has spent a lot of money in arranging such affairs, and was prepared to spend a lot of money on this one. Our idea was to make it a freer run than former ones, without so much restriction as to the times of arriving and departing and without any noon controls; to have a longer run, and one that would be more of a test than any preceding affair has been. Why the manufacturers should want to shoulder the expense and trouble I cannot conceive, but we will not be sorry to be relieved of it. I think they are foolish, though, for the results of such a contest conducted by the manufacturers themselves would not be apt to make the same impression on the public that it would if run by the club or some other impartial body. The manufacturers want to sell their machines, and I suppose the run will be a good advertisement for them. As for what their cars accomplish in the contest, I fail to see the value it will have in influencing people who are prospective buyers. What is the value of a report on what they think about themselves and their cars? They might just as well simply declare that all they say in their catalogues is true.

"I have written to the president of the National Association of Automobile Manufacturers asking the date of their run, as we have no desire to clash. It was only Saturday that I wrote and I have had no reply yet. After I hear I will be able to talk more definitely about what we will do. We may not go to Montreal, but to some other city. Even if we change the character of the run to a pleasure tour, there will be some feature of competition retained by keeping a record of what the cars do."

#### Automobile Congress Meets in Paris.

During the greater part of last week the headquarters of the Automobile Club of France were given over to the second annual Automobile Congress, prominent motorists from all over Europe attending. The programme included a discussion of the best motors, valves, carbureters, lighting, transmission, frames, wheels, brakes, steering gear, lubricators and bodies.

#### Glidden Party Sails.

Charles J. Glidden and party sailed from Boston on Tuesday of this week on the Ivernia, of the Cunard Line. They go to Ireland to witness the Bennett Cup race, and will then tour through Norway and Sweden.

### News of the Oldsmobiles.

A small branch of the Oldsmobile business has been established at Long Branch, where a thriving trade is being done. It is chiefly a garage and repair station, located there in order to look after the interests of the numerous Olds customers stopping at the resort, but it has developed quite a lively sales business. I. H. Manning, who was formerly at the station in West Thirtieth-st., New-York, is in charge.

At the Thirtieth-st. station of the Oldsmobile a record breaking in the receipt and delivery of machines has been going on. For several weeks the popular runabouts were being received, and delivered at the rate of thirty a week, and during one fortnight recently one hundred cars were received in two weeks and delivered to their purchasers. The New-York company is now practically making immediate deliveries, not getting more than three or four days behind. Having several places now to look after, R. M. Owen, the general manager, is dividing his time between them more, and R. G. Howell has been placed in charge of the station in West Thirtieth-st.

### Across Country in 1904 Peerless.

An arduous bit of testing is to be given the first model of the 1904 Peerless touring car before the work of proceeding with stock cars is begun. The new model is now nearing completion in the shops, at Cleveland, and is expected to be finished by July 1. It is a four cylinder, 24 horsepower car, with mechanically operated valves. It has three speeds forward and a reverse. The body is a true King of the Belgians pattern, and very roomy. As soon as the car is finished, C. G. Wridgway, of New-York, is to take it and make a trip from Cleveland to Chicago, there to St. Louis and back, all the way to New-York.

### An Olds Indoor Track.

Although the Olds Motor Works have an outdoor track measuring half a mile, on which Oldsmobiles are tested, it is not deemed sufficient, as it cannot well be used during inclement weather. The concern has under contemplation, therefore, a weather-proof testing ground, and plans are now being drawn for it. It is proposed to make a track of sufficient width for two machines, with a slant of about 60 degrees from the level. The structure is to be circular in form and 150 feet in diameter. The architect believes the roof can be supported by a single column in the centre of the building.

### Make Bodies of Veneer.

One of the concerns making a specialty of veneer, or built up, wood automobile bodies is the American Veneer Co., No. 449 Pacific avenue, Jersey City, N. J. These are manufactured in a wide variety of styles, including both front individual seats and tonneau rear. So well liked are the goods that the company has been obliged to increase its facilities, and it is now prepared to take care of a large amount of work of the kind.

### Baldwin has a New Chain.

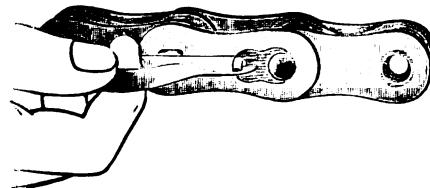
In their new model detachable chain the Baldwin Chain and Mfg. Co., Worcester, Mass., believe they possess an easy winner, and they launch it with the confident expectation that it will speedily commend itself to a large number of automobile users.

The design is a marked departure from that of previous models. While retaining all the advantages of a detachable chain, with its ease of repair, the fitting of a small spring on the side of each link imparts to it all the permanency of attachment of a solid chain,



except, of course, when the spring is taken off. With the springs removed, the chain is practically identical with the present well known detachable chain; it is thus impossible for the chain to separate on the road, or if broken, for any except the broken parts to separate.

Cut No. 1 illustrates the construction of the chain. Each pin is riveted at one end and formed for a detachable connection at the other. The detachable and free ends come on opposite sides, so that the pull on the chain is even, whereas, if both riveted ends were on the same side and both free ends on



the same side, the chain might draw unevenly.

The small fixture shown in the cut is a steel tempered spring, the two jaws of which set under the head of the pin, and a small tongue, which slips into the hole in the side link in which the pin is inserted, thereby holding the free end of the pin in place in the link. This spring is more accurately shown in Cut No. 2.

In Cut No. 2 is shown a small tool, by which the small lock spring may be removed and replaced. These tools will be delivered with each chain, and, while it is not necessary for removing the spring, it adds very much to the convenience of handling the chain. The spring can be removed by any small tool, like a jackknife or screw driver.

The chain has been exhaustively tested in actual running, and not the slightest fault has developed in consequence.

### Contracts let for Packard Plant.

Contracts have been let for the new plant of the Packard Motor Car Co. at Detroit, Mich., and work will be begun on the buildings at once. They will have three times the capacity of the Warren plant, and will cover a plot 400 feet square. Connection with the Michigan Central Railroad will be made by means of a side track.

### Buckboard Design is Patented.

While it is popularly supposed that the buckboard principle is as old as the hills, and so free for any one to adopt, such is far from being the case when applied to a motor vehicle. The makers of the Buckboard, the Waltham Mfg. Co., are too longheaded not to protect themselves when bringing out such a radical departure as this, and they are the owners of a very broad patent covering this popular little car. The claim is a very complete one, covering every particular form of a flexible platform used in conjunction with a rigid axle, as the following extract from the patent specification will show:

"In a motor vehicle, the combination of a motor supported otherwise than upon the body of the vehicle, an elastic platform which connects two transverse axles and holds them in parallelism, a seat mounted on the platform, wheels on the end of the axles and means for operating two of said wheels for the purpose of steering."

The temptation to produce a low priced vehicle of this sort may be very tempting, but the existence of this patent may well cause those seized by it to pause. The Waltham company announce that they will vigorously enforce their patent rights, and this will prove an additional deterrent.

### Mr. and Mrs. George A. Banker.

Some branches of the automobile trade are very dull these days, and some arms of it having been going to waist. It is the proper season for vacations and bridal trips, and Cupid seems to have been putting in his full share of time among the branches and arms of the industry. Following the news of last week that W. E. Metzger has signed papers with a new partner in the form of a matrimonial contract, comes the news that George A. Banker, of Banker Bros., agents for the Peerless cars, has decided to depart from the life of single blessedness and take unto himself a partner to double his joys and cut his woes in twain.

The wedding occurred at New Haven, at the home of the bride, Miss Marie Pommery, at high noon on Wednesday, and Mr. and Mrs. Banker left at once on their honeymoon trip.

### Owosso Enters Auto Field.

Owosso, Mich., people were surprised last week when Secretary Erisley of the Owosso Carriage Co. appeared on the streets in an automobile the company will hereafter manufacture. The company has been experimenting with the car for the last ten months, and the test, the first in public, was entirely successful.

If the car, which is a 12 horsepower touring car, seating four people, proves the success anticipated, the making of carriages and cutters will, it is stated, be discontinued within a few months.

Freeport, Ill., has a new dealer, C. C. Shoemaker. He is located on Mechanic street, and his first lot was a freight-car-load.

## PORTO RICO ALLURES

### Magnificent Macadam Roads Offer Fine Field for Transportation Vehicles.

San Juan, P. R., June 6.—The advent of Americans and American ways in Porto Rico is doing much to bring about the advancement of the island, and place it abreast of the times, although the indolence so common to all tropical countries is hard to overcome.

The magnificent macadam roads, winding on easy grades through glorious scenery have heretofore been given up to ox teams with their clumsy two-wheeled carts, or the picturesque pack horse with his wicker panniers surmounted by a contented negro, puffing the ever present cigarette. Time, for the average native, does not exist, "mañana" (to-morrow) being his watchword, and his motto, "Never do to-day what you can put off till to-morrow." Like the Irishman who did not fix his leaky roof when it rained for fear of getting wet, nor when the sun shone, because then it did not need it, they live happily in to-day, leaving for "mañana" the evil thereof.

No wonder, then, that the proposition of an American firm to transport the United States mail from San Juan to Ponce by automobiles, instead of the slow going, bell bedecked coaches, hauled by bony, miserable looking ponies, was regarded with keen suspicion and stern opposition. However, the Automobile Company of Porto Rico persisted in their efforts, and while to them is due the credit of the introduction of the auto, to them is also due the failure of the attempt; due entirely to mismanagement and lack of proper foresight.

The mail contract, amounting to \$12,000 per annum, was easily secured, and the company at once placed in operation a daily line of automobiles, leaving Ponce and San Juan in the morning, and passing each other at Aibonito, a little town crowning the summit of the mountain range, 3,000 feet above the sea.

Over 200 tons of mail per annum was to be transported a distance of 82 miles, crossing from San Juan, the northern seaport, some miles of rolling country, then over a mountain range to Ponce, the southern seaport of the island. The company, however, placed in operation nothing but light, 4 to 8 horsepower runabouts, which soon proved totally inadequate to the demands made upon them, soon breaking down under the heavy loads and constant overpressure necessary. Some six months of constant trouble, many breakdowns and regular falling behind in the time specified in their contract resulted in the government's cancelling their contract, although they had just prior to that time secured two heavy, mountain climbing machines of 16 horsepower, which were doing the work with ease.

From one end to the other the road is

smooth as a floor, and, save in the heart of the mountains, the grades are easy. Palms of all kinds line the way, sprinkled here and there with golden yellow oranges and mangoes, while the brilliant crimson of the coffee berry shines like fiery eyes among the vivid greens of the foliage.

While it is true that automobiling has received a black eye here, there is no doubt of its feasibility when proper machines are used; and a moderate priced auto line from San Juan to Ponce would be well patronized, besides carrying the mail.

A similar line running from Camuey to Aguadilla, where Columbus made his first landing in the island, would be a good paying line; especially as the mail contract could be secured with ease, the present mode of transportation being slow and unsatisfactory. The road, like that to Ponce, is magnificent, being well macadamized and kept in perfect condition, offers no obstacles that proper machines would not laugh at.

Another beautiful road, easily practicable for automobiles, is that from Arecibo, a seaport and railroad town on the north coast, to Utuado, an interior town of considerable prominence. The entire distance of sixteen miles lies over a splendid macadam road that winds along the valley of the Arecibo River, through glorious tropic scenery. Here also the mail service could easily be obtained, much dissatisfaction being expressed with the present slow method of delivery.

Hundreds of thousands of dollars are being spent annually in the construction and maintenance of first class macadamized roads, and it is only a question of a year or so before the island will be circled and crossed and recrossed with roads that will be ideal for auto travel.

The firm of enterprising Americans who will enter the field with proper machines, and place one or two transportation lines in operation will be richly rewarded for their trouble and find, as the island opens up and the people become used to the better method of travel offered by the automobile, a large field for both business and pleasure machines.

### The Gasolene Fumes Toper.

Much has been said about the temptation the alcohol driven car presents to the impetuous toper, who, deprived of his accustomed libations, will go to almost any length to satisfy his raging thirst. Even denaturalized alcohol is not safe from him, it is said. Now some one has discovered that gasolene affords a vehicle for the hard drinker. To inhale the fumes from gasolene tanks and get into a hopeless state of intoxication is said to be a new and delightful form of recreation with some car drivers. The same end can be achieved by dipping a rag in gasolene and using this as "smelling salts."

St. Paul folks want a motor 'bus line to Minnehaha Falls, a popular resort. At present the trip is made by the street railway, and it is circuitous and lingering.

## NEW PANHARD RACER

### Slanted Motor and Immense Hood are two of its Notable Features.

Piqued, apparently, by their fiasco in the Paris-Madrid race, where their vehicles made a lamentable showing, the Panhard-Levasor firm made great preparations to regain their laurels in the Ardennes Circuit.

They brought out a new type of car especially for this race, its salient features being the immensely long bonnet and the downward slant given the front of the engine. The latter is slung by strong eyes to transverse rods across the frame, this being done to allow of a very large sized flywheel being used.

Both induction and exhaust valves are mechanically actuated, the glands for the exhaust lifting rods being of considerable length. The water space around the upper part of the cylinders, which are each separately bolted to the crank chamber, is formed of a convoluted gun metal sleeve, but the cylinder heads and valve chambers are formed with water spaces of their own. The walls of the piston are lightened by each having four large holes drilled in it, and the four connecting rods are made hollow for the same reason. There is a long bearing between each crank, and the crank chamber is divided internally into four compartments by diaphragms to retain the oil, which otherwise, owing to the forward tilt, would only serve the front crank bearing. The cylinders are fed from one hot water jacketed Krebs carburettor having one jet only. Each cylinder has its own separate exhaust pipe, delivering into a horizontal exhaust box, which is not a silencer.

The half-time induction shaft has a sliding rod within it, which so acts upon the induction valve cams when drawn out that compression is largely reduced for starting the engine. The flywheel is not coned on its rear face, as usual, but has a parallel rim, on the interior periphery of which are cut four deep slots. The clutch is formed of two members, one running loose on the clutch shaft, with feathers engaging with the flywheel slots already mentioned, and coned internally to take the driven member which slides on, but is fast to the clutch shaft in the usual way.

The pressed steel frame has been formed with all necessary brackets, and is carried on 920x120 driving and 870x90 steering wheels.

### Effect of High Speeds.

If a racing motorist is not to have his neck wrenched he must be provided with a wind shield. Henry Fournier describes the air pressure at very high speeds (between eighty-five and ninety-five miles an hour) as being so strong as to cause difficulty in keeping the head from being wrenched back. Resisting such a force takes seriously from the "level headedness" essential to great speeds.



Automobiling in Porto Rico.



1. Mail Auto Approaching Ponce Post Office.

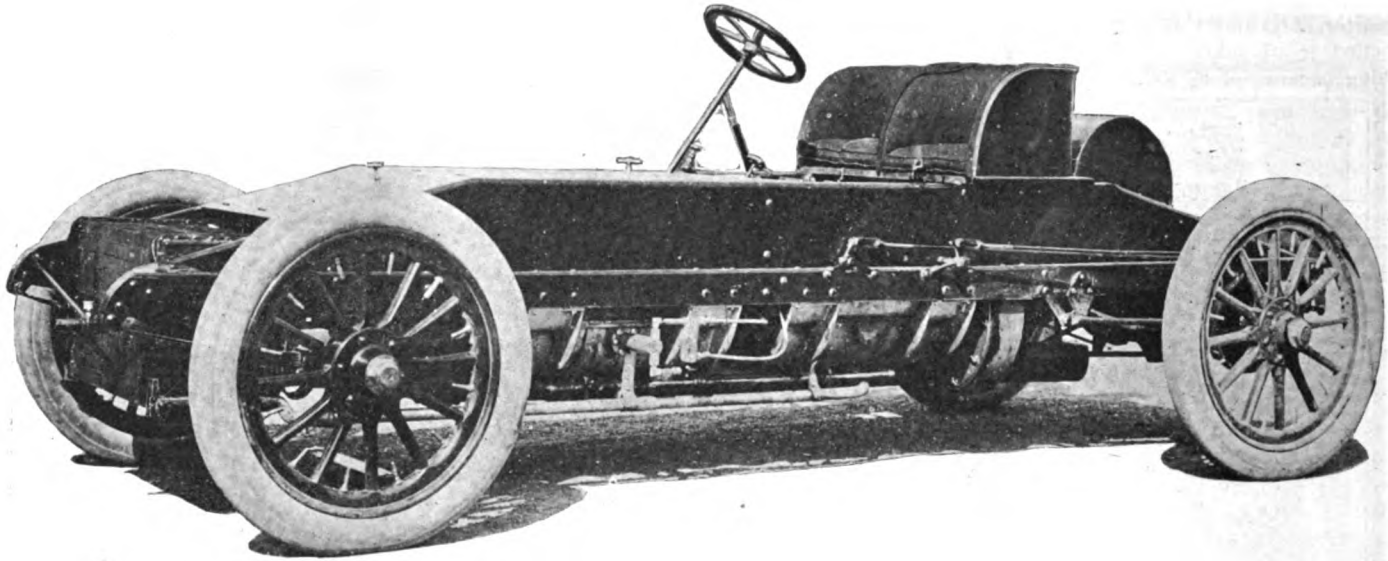
2. Robert Giles on Military Road, San Juan to Ponce.

3. Climbing Hill on Road, San Juan to Ponce.

4. At Camineros House Where Dinner is Taken.

5. Leaving Station House at San Juan.

6. Repairing on Road, San Juan to Ponce.



ALEXANDER WINTON'S 80 H. P. FLYER.

### A STRUGGLE OF TITANS

(Continued from page 476.)

perior staying powers. This year, too, finds three teams in addition to the French entrants, produced in their entirety in England, Germany and the United States, respectively. The seed planted in 1900 has borne fruit.

The rules are lengthy, yet concise, and cover every point likely to arise. Summarized, they provide that every foreign club recognized by the Automobile Club of France may challenge the holder of the cup. This includes the clubs of Belgium, Austria, Switzerland, Turin, Great Britain, Germany and America. All challenges for the race must be made before January each year, and a deposit of \$600 must accompany the chal-

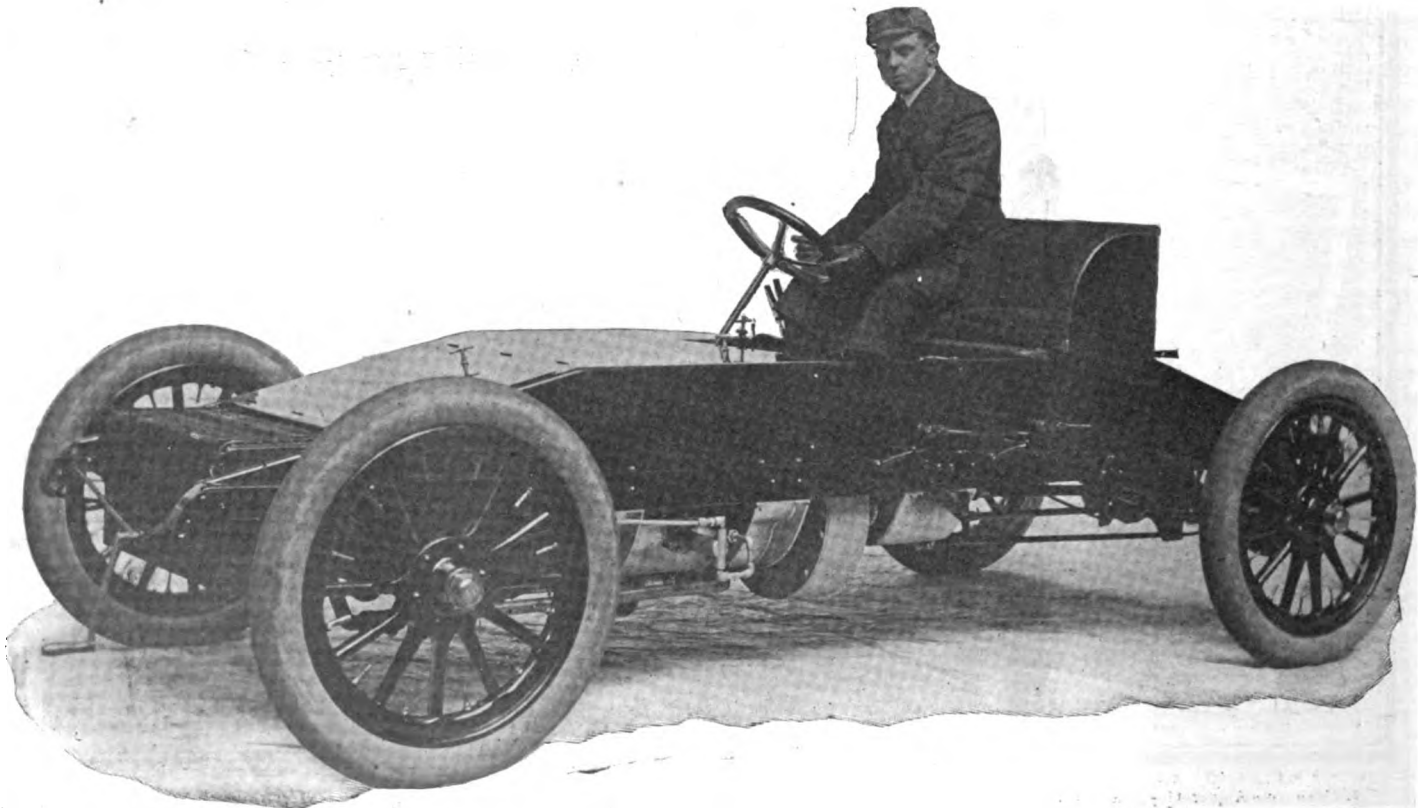
lenge, which will be refunded if one representative of the challenger starts in the race. Each club may be represented by one, two or three vehicles, at its option. It is in no sense a team race.

The representatives of each country are not scored as a team, but as individual competitors. The man who wins the race wins for his country, although his two fellow countrymen fail to finish and the three of some other country finish right behind him. Every part, including accessories on each machine, must be made in the country it represents. The holder of the cup has the right to select the course, which must not be shorter than 550 kilometres nor longer than 650 kilometres—341.55 miles to 403.65 miles. The date of the race must be be-

tween May 15 and August 15, the exact time to be named by the club holding the cup. The operators of the machines must be members of the club they represent.

The cars must not weigh less than 500 kilograms nor more than 1,000—881.84 and 2,204.60 pounds. The competitors must be started one at a time at two minute intervals, first a member of the club holding the cup, then a representative of each of the others in the order in which their challenges were received.

This year the interest of America in the race is commanded because it is the first time that this country has formally challenged for the cup and had a full team regularly entered in the race. Once before, in the year it was first run, America was rep-



PERCY OWEN'S 40 H. P. WINTON.

resented, but then it was by an individual competitor, Alexander Winton, and he was compelled to abandon the contest without finishing because of an accident.

The race was instituted in 1900, when James Gordon Bennett presented the cup to the Automobile Club of France, with the condition that it was to be a perpetual challenge trophy for a road race open to all nations having automobile clubs recognized by the Automobile Club of France. In the first race France had it all her own way. The race was run on the road from Paris to Lyons, and always has been considered to have been largely a fizzle. The distance was 353½ miles. Charron, the Frenchman, won in 9 hours and 9 minutes, with a Panhard. His speed averaging 38.45 miles an hour. Girardot was second, and was the only other competitor to finish. Winton (America), Jenatzy (Belgian) and De Knyff (France) all had accidents and had to quit.

In 1901 the race was run in conjunction with the Paris-Bordeaux event on May 29, and again it was practically a failure, from the standpoint of furnishing good competition and a spectacle. Only one of three Englishmen entered for the race put in an appearance. That one was S. F. Edge, but he was unable to get to Paris with his English tires, and having no time to get fresh ones from home he put on French tires. That barred him from the race. The Germans were unable to get German made bodies fitted to their cars in time for the race, and so it was started with three Frenchmen in it—Charron, in a 24 horsepower Panhard; Levegh, in a Mors, and Girardot, in a Panhard. Charron and Levegh broke down and Girardot finished alone in a crippled condition. He made the 327½ miles in the net time of 8 hours 50 minutes 50 seconds, or at about the rate of thirty-seven miles an hour.

Last year the race was run in connection

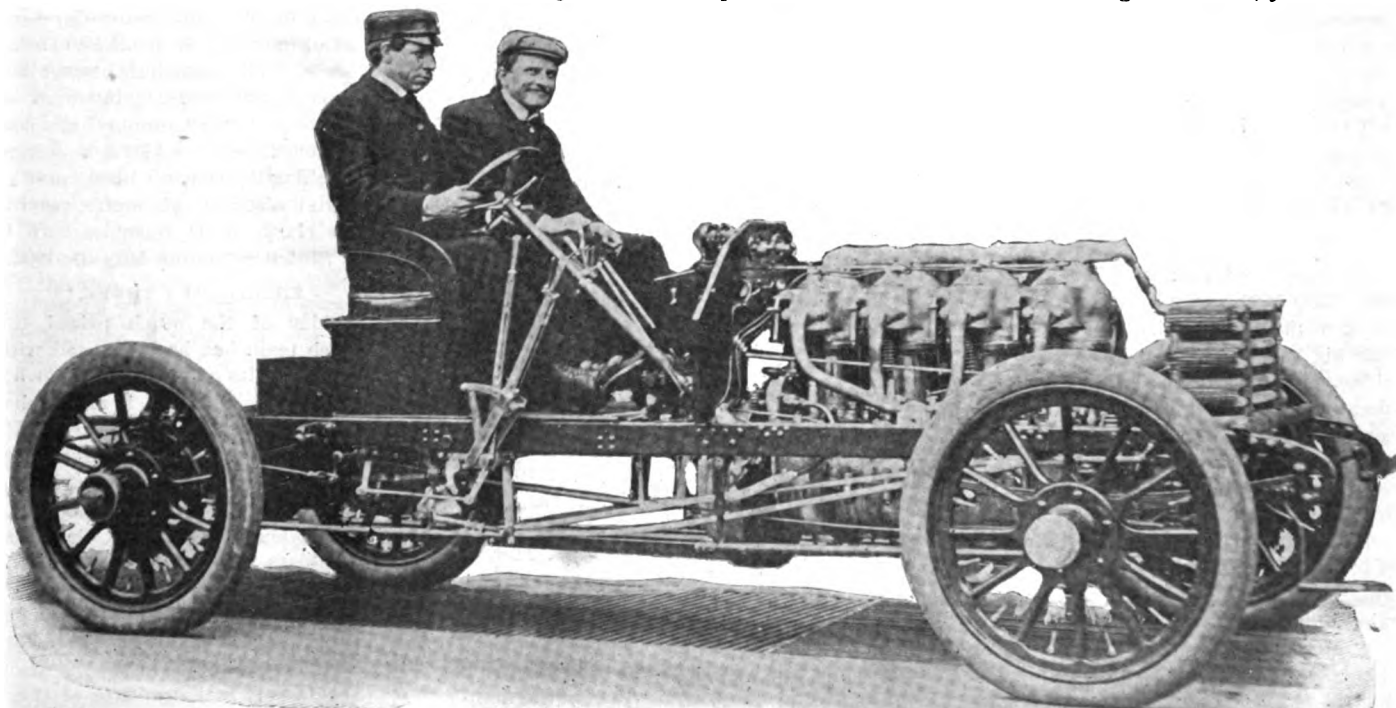


LOUIS P. MOOERS.

with the Paris-Vienna contest, the cup race finishing at Innsbruck, a distance of about 379 miles. S. F. Edge, of England, was the only competitor not of France. The other contestants were Girardot, Fournier and De Knyff. Fournier and Girardot broke down before completing half the journey. Edge had only a 30 horsepower Napier, while De Knyff's Panhard was twice as powerful. The English machine proved the more re-

liable, however, for De Knyff broke down near the finish, when he was so far ahead in the race that he seemed a sure winner, and Edge finished the race alone and won the trophy.

When S. F. Edge, in an English car, the Napier, won the cup last year by defeating singlehanded the three competing Frenchmen, it took a little time for Englishmen to realize their good fortune, just as it did the



THE MOOERS-PEERLESS & H. P. RACING CAR.

Frenchmen to become cognizant of the extent of their loss. Consequently it was not until some weeks after the headlong rush down the Austrian Alps that the question of a course for the 1903 race was raised. Then some brave soul—there are now several claimants for the honor—hazarded the suggestion that it would be a good idea to run it in Great Britain. With the twelve mile maximum speed law and English conservatism to face, however, that country was never seriously considered. Instead, Ireland was suggested, and upon being viewed in a variety of aspects, it seemed a good suggestion. Thereupon a discussion as to ways and means arose, and the more the matter was argued the more strength the project acquired. The gain to the British motor industry from an event of the character was painted in glowing colors, and the importance of the contest viewed solely as a sporting event was touched upon.

#### LIKE AFRICA IN OUTLINE.

Finally it was decided to ask Parliament to authorize the race, and the government, looking upon it as a good way to obtain, or retain, Irish support, consented. No opposition of real moment was encountered, and the bill passed both houses amid pretty general commendation. The evident desire of the French club to have the race again run in France probably had something to do with this.

Permission once obtained, British and Irish motorists set about selecting the best obtainable course. One starting some thirty miles from Dublin was favored from the start, and, after a number of minor changes had been made the present route was definitely decided upon.

In outline it somewhat resembles an outline map of Africa, but it is separated into two parts, which are known as the major and the minor loop. It is about forty-five miles around the smaller loop and 102½ miles around them both, and there is a dividing stretch of about thirteen miles that must be covered six times in going three times around the combined loops. The small loop will be covered first, and then the race will go three times around the loops combined. As measured by a surveyor, the total distance will be 368 miles 765 yards.

#### DETAILS OF THE COURSE.

The start is made from near Old Kilcullen. The small loop is then made by Carlow and Athy back to the start, an irregular triangle. Then the big loop is made, from Old Kilcullen by Monasterevan, Stradbally, Athy and Ballyshannon. It is the stretch between Athy and Old Kilcullen that must be covered six times. The race is expected to last between seven and eight hours. It will be started at 7 o'clock on the morning of July 2.

The country in which the course is laid is smooth and undulating. There are few steep hills, but many long and gentle slopes, admirably suited for fast racing. The roads, if not as straight as the French roads, are remarkably straight for Ireland, and there are at least three such perfect stretches of several miles as could hardly be bettered in

the United Kingdom. Mr. Edge expresses the opinion that, as regards both straightness and surface, the course compares favorably with that on which he won the cup last year.

The special commission in a run around the course not only settled the course, but fixed controls, arranged for necessary repairs and alterations, and chose spots for the red flags that will mean stop and the green flags that will mean go slowly. Every foot of the road was carefully noted.

#### DANGER POINTS MARKED

The commission has marked several permanently dangerous spots with flags, and many others, more amenable to treatment, will be eliminated before the race by the county surveyors. The repairs which have been undertaken are principally rolling the roads to a perfect surface, rounding off bad corners and levelling up the road on each side of the little bumpy culverts, which are so common in Irish country districts. These culverts present no dangers to slow touring cars, but they provide racing cars moving at the rate of forty yards a second, with a "jump off" for leaps of thirty or forty feet through the air. The cost of all these repairs, which will be considerable, will be largely met by the British Automobile Club, but it is hoped that the county councils and other public bodies in Ireland will make contributions.

Controls—that is to say, spaces through which the cars will have to proceed slowly under supervision of racing officials—have been arranged at Casuedermot, Carlow, Athy and Kildare, six in all, since the control at Athy will come into force twice in each time around.

#### THE MEN IN THE RACE

In the personality of the men who are to operate the competing cars is found much of interest. One circumstance especially noteworthy is that nearly every one of them was formerly prominent in bicycling, either as a racing man, manufacturer or road rider, and several of them were formerly champion racers on the bicycle. Another point of note is that on the team representing America there is one British subject, Mr. Winton, while on the German team there is one prominent American, Foxhall Keene.

The teams as named, with the identifying colors assigned for their cars, are as follows:

American (red)—Alexander Winton, Winton car; Percy Owen, Winton car, and Louis P. Mooers, Peerless car.

English (green)—S. F. Edge, Napier car; Charles Jarrott, Napier car, and J. W. Stocks, Napier car.

French (blue)—René de Knyff, Panhard car; Maurice Farman, Panhard car, and M. Gabriel, Mors car.

German (white)—Baron de Caters, Mercedes car; Foxhall Keene, Mercedes car, and Jenatzy, Mercedes car.

#### ALEXANDER WINTON.

Beginning with the Americans, Alexander Winton, of Cleveland, was formerly the manufacturer of the Winton bicycle, and was

one of the pioneers in the automobile industry in this country. He is a medium sized, wiry man of nervous temperament. He was born in Scotland forty-three years ago, and came to America about twenty years ago. He began by taking charge of a marine engine shop, and a little later engaged in bicycle making at Cleveland, Ohio. In 1895 he began building gasoline automobiles and exploiting them. He was the first man to attempt a demonstration of the utility of the automobile by making long trips across the country in one. In 1899 he made the trip from Cleveland to New York in three days and a half. At about the same time he began to be conspicuous as a record maker on the racetrack. Until May 30 of this year he held the American record of 1:02¼ for a mile on the track. He still has the record of the best time ever made on a straight-away course by an American car, through having driven his "Bullet" racing car a mile on the beach at Ormond, Fla., in 52.15 seconds on March 28 of this year.

#### MOOERS AND OWEN.

Louis P. Mooers, of Cleveland, is a Yankee, with the reputation of being an exceptionally clever mechanic and a daredevil in motor car operating. Like Winton, he is the designer of the car he will drive, and knows its every peculiarity as a yachtsman knows his boat. Mr. Mooers was born in Massachusetts thirty years ago, and looks the clever, reckless, sport loving individual that he is. Mooers also was formerly a bicycle builder in a factory at New Haven, and is now the designer of the Peerless Motor Car Co.

Percy Owen, of New York, is a typical city man, whose quiet, affable gentility conceals great quantities of daring and courage. He was born at Oswego, N. Y., in 1875, and drifted from the insurance business into that of automobiles, becoming the New York manager of the Winton Motor Car Co. He is a popular member of the New York Athletic Club, as well as of the Automobile Club of America, and is the winner of many trophies in automobile racing. He holds a record for a mile in 1:17.3-5 for gasoline cars weighing between 1,000 and 2,000 pounds, and also the kilometre record, for the same class, of 47 seconds, both being made on Staten Island on May 31, 1902.

#### ENGLISHMEN THREE.

The holder of the much prized trophy, the English team has been selected with extreme care, and its composition is such that, if machines back up men, it should have a "look in" at the finish.

Selwyn F. Edge, thrice entrant, twice contestant and once victor in the cup races, is an old bicycle racing man, now the head and front of the big Napier firm. Coolness and resourcefulness rather than dash mark him. He emulated the tortoise in last year's race, and crawled home while his three French competitors came to grief one after another.

Charles Jarrott is a graduate of the same school as Edge, and his automobile racing



career has been quite as varied. His attitude, mental and physical, is expressed in his pithy remark quoted in these columns a few weeks ago, "The overcautious man never gets there; the overreckless man comes to grief." Jarrott won the Ardennes Circuit race last year, and made second best time to Bordeaux in the unfinished Paris-Madrid race.

J. W. Stocks, third member of the team, has done infinitely more racing on bicycles and motorcycles than on automobiles. But he was a noted champion, heady and plucky, and he has done enough speeding with the four wheeled vehicle to prove his calibre in the new field.

#### CHAMPIONS OF LA BELLE FRANCE.

To the French motorist the Bennett Cup is the apple of his eye. Winner in two contests, he was disagreeably surprised to find it wrested from him last year, especially as it was by what he regards a fluke. Consequently he seeks to regain the cup with all the ardor of the Gallis nature.

Fernand Gabriel, who flashed over the "great white road" to Bordeaux in faster time than any other motorist on that fateful May 24, is undoubtedly France's premier racing man. His eleventh hour selection to take Henry Fournier's place on the team is referred to elsewhere, and denotes the estimation in which he is held. He, too, raced on a bicycle before the motor claimed him, and perhaps no man in the world to-day surpasses him in the qualities which will tell most on July 2. Daring to a remarkable degree, he yet shows no marked evidences of the undue recklessness which Jarrott deprecates.

Réné de Knyff, chevalier of French motorists, won his first great triumph in 1898, when he won the Paris-Bordeaux race, and followed it by annexing the "Tour de France" in the following year. Temporarily eclipsed by Fournier, winner of the 1901 Paris-Berlin and Paris-Bordeaux, he came to the front again last year, when he almost won the Bennett Cup for France. On the last stage his Panhard car went wrong, and Edge passed him and reached Vienna first. De Knyff tempers daring with discretion, but is scarcely less formidable on that account.

Henri Farman, third and last of the team, is one of the two Farman brothers famous in French racing annals. He ran second to the late Maurice Renault in the Paris-Vienna race of 1902, and was the victor in a number of less notable events.

#### TWO GERMANS AND A YANKEE.

Good drivers as the Germans possess, it is their cars more than the drivers that have so far written their names on the roster of fame. Of their three men two are foreigners, one, Keene, an American, and a second, Jenatzy, a Frenchman. This year they compete for the cup for the first time, three Mercedes cars having been selected.

Baron de Caters participated in the Ardennes Circuit last year, but struck another car in trying to pass it and had a narrow

escape from death. He has driven in other big races, but never scored heavily.

M. Jenatzy's name has long been a familiar one in French annals. He was well up in front in the Ardennes Circuit, when a wheel broke and caused the car to overturn, cutting its driver up considerably.

Foxhall Keene has during the last three years started in a number of races, both in this country and Europe, but has failed to place any victories to his credit. In other lines of sport he has proved himself to be daring and skilful, and it may be that it is reserved for this important contest for him to win similar honors in automobilism.

The race will be started at 7 a. m. It has been decided that S. F. Edge, as holder of the cup, will start first with his green Napier racer, which will be known as British No. 1. The second to leave will be Réné de Knyff, on his blue painted Panhard, the French No. 1. The third machine to start will be an American. The German, being the last to challenge, their No. 1, a white painted Mercedes car, probably driven by Baron de Caters, will start fourth. The fifth machine will be British No. 2, the sixth will be French No. 2, the seventh will be American No. 2, and so on.

#### CUP RACE CARNIVAL.

In connection with the big race the committee of the Automobile Club of Great Britain and Ireland has arranged a fortnight of sport, the programme for which is as follows:

Wednesday, July 1—Exhibition of competing cars at Earlsfort Rink, Dublin, open from 4 p. m. June 30 to 4 p. m. July 1; weighing of the racing cars.

July 2—International cup race.

July 3—Gymkana at Phoenix Park, Dublin, and torchlight procession to Castle at night.

July 4—Speed trials in Phoenix Park, Dublin.

Monday, July 6—Tour to Newcastle and Belfast.

July 7—Four miles time test at Newcastle. Hill climbing trial for Henry Edmunds's trophy.

July 8—Return to Dublin. Sleep there.

July 9—Start for Cork.

July 10—Arrival at Cork. Eliminating race for motor boats at Queenstown in morning. Speed or hill climbing trial at Cork in afternoon.

July 11—Motor boat race for Harmsworth Cup at Queenstown.

Monday, July 13—Start of tour through beautiful scenery of the south.

July 14—Arrival at Killarney.

July 15—Hill climbing trial on the Killorglin-Tralee road for the County of Kerry Cup and termination of the official tour.

#### Special Clocks for Cup Race

Special made clocks are to be used in timing the Bennett Cup race. In these clocks, which are the work of a well known London firm, the case is of brass, the diameter twelve inches and the dial ten inches. The movement is so constructed as to withstand

vibration, with a lever escapement so that the clock will go in any position. The dial is most distinctly and accurately marked, the important feature in this clock being the addition of a centre second hand. These clocks are to be used at the entrances and exits of the controls, and by having the centre seconds the timekeeper can take times to one-fifth of a second.

#### Americans at the Race.

Among the members of the Automobile Club of America who are expected to be at the scene of the Bennett Cup race are A. R. Shattuck, president of the club; Colonel John Jacob Astor, Clarence Gray Dinsmore, J. Howard Johnson, Courtlandt Field Bishop, David Wolfe Bishop, Charles J. Glidden, Lloyd Warren, John A. Hill, W. K. Vanderbilt, Jr., B. M. Baruch, Isaac L. Rice and M. D. Chapman.

#### Gabriel's Appointment Popular.

The substitution of M. Fernand Gabriel for M. Henri Fournier as driver of the Mors car in the Bennett Cup race, which took place this week, has been the subject of much gossip in Paris, but the consensus of automobilist opinion there is that the Mors has the best French driver.

#### No Fournier-Winton Race.

Last winter, during the show in Madison Square Garden, the Motor World gave notice that some good advertising was being done by press agents through the medium of blustering challenges and defiances. Finally Fournier was reported to have signed to race Alexander Winton at the Empire City track, New York, on July 25. This week the Empire City Trotting Club gave notice that the race was off. It seems that Mr. Winton never signed to race with Fournier, and before leaving for Europe he took occasion to remark that he had no race on with the Frenchman. The promoters of the contest went ahead in arranging a race for Mr. Winton with the latter's press agent, C. B. Shanks. The negotiations served all the purposes of publicity quite well. There will be a race meet at the Empire City track on July 25, anyway.

#### Having Fun With Gates?

Parisian motor car dealers and makers, according to rumor, recently had some fun, or thought they had, with our famous fellow citizen, John W. Gates. On a previous trip Mr. Gates got into some sort of pother with a Paris automobile maker, with the net result that on his late visit the entire Paris automobile trade decided to blacklist Gates and to bar him from sale or hire—so 'tis said. But, taking into account Gates's ingenuity, his checkbook and French cupidty, 'tis doubtless if the boycott did much walking while in the French capital. One can hear the French dealer say: "Non, I will not rent or sell Mr. Gates; but to his friend ah! zat eez different."

The membership of the new Automobile Club of Buffalo, N. Y., has reached 217.



## PHILIPPINES NEED AUTOS

### Peculiar Transportation Methods and Good Roads Make Motor Vehicles Desirable.

The Bureau of Insular Affairs at Washington has received the annual report of A. U. Betts, Governor of the Province of Albay, P. I., for 1902, in which he says there is a great opening for automobiles in his part of the Philippines.

The pressing demand for transportation has resulted in the establishment of stage lines and the introduction of bicycles and automobiles, which are now running on the public highways. Four hundred of the former have been imported into the province during the year.

The road between Legaspi and Ligao, which passes through the centre of the great hemp country, was practically completed during the early part of the year. The enormous traffic, however, passing over this highway made it necessary, in order to maintain it in passable condition, to eliminate the antiquated bull cart. The Provincial Board therefore prohibited their passing over the road, and made it obligatory to use carts with modern wheels, movable on axle and with a four-inch or greater tread.

These restrictions crippled the transportation facilities for a short time, but suitable wheels were quickly imported, and the inconvenience at first experienced was readily compensated for by not only the preservation of the highways, but also by the amount of cargo the carts were able to carry.

It formerly required three days for a cart drawn by three bulls to make a trip over the full length of the road, while, with modern carts on the new highway, the trip can now be made in one day, using only two bulls and carrying 50 per cent more cargo.

When these facts became evident no further argument was necessary to induce the cart owners to purchase modern equipage. It has been estimated that the saving in the cost of transportation over this highway in one year only, as contrasted with former conditions, amounts to \$720,000, local currency. This saving to the people of the province has been effected in one year through an expenditure for the maintenance of this highway of about \$67,889, local currency. There has been imported into the province during the last year about 5,000 cartwheels of modern construction.

The question of transportation still remains one of the most important problems to deal with in the province. The greater portion of this year the average price for a bull cart per day has been \$40, local currency, while the average cost of a carromata has been \$25. The great demand for transportation is for moving the hemp from the interior down to the seaports and taking rice and merchandise from the ports to the interior. There were shipped from the port of Legaspi this year about 344,270 piculs of hemp and

455,770 piculs of rice entered the same port.

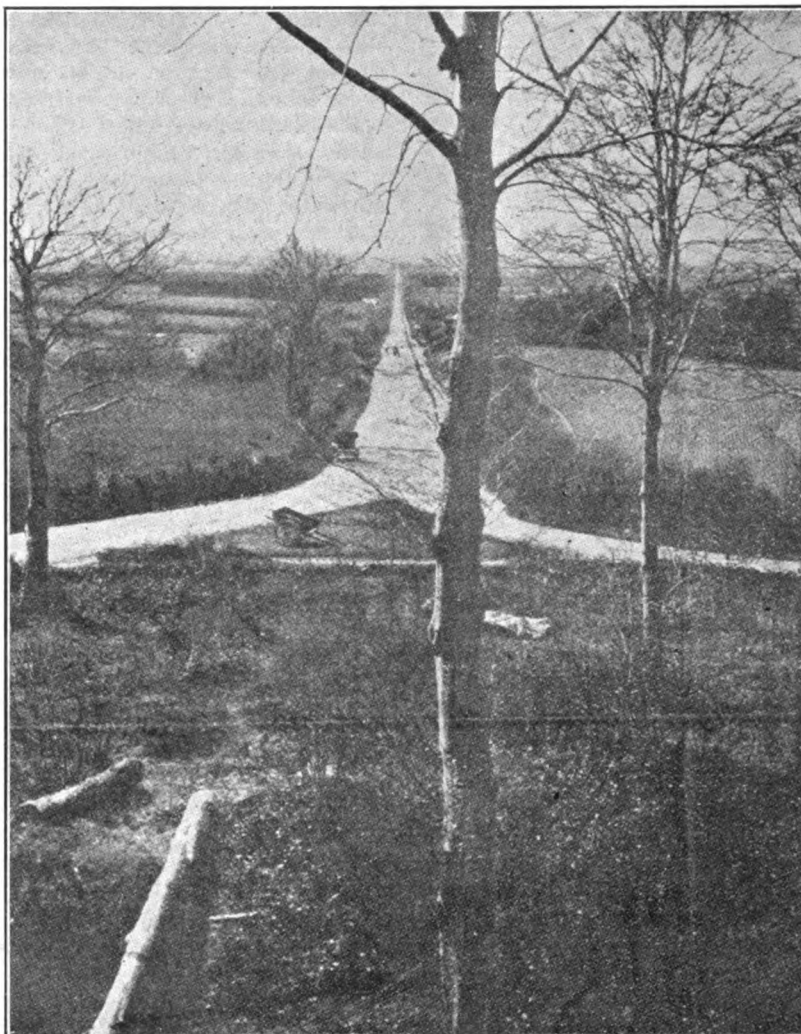
This great demand for transportation and the excessively high price charged has induced outside capital to bring into the province modern traction engines. These have an 18-inch tread, while the cars used in their trams have an 8-inch tread, causing, therefore, but little damage to the highways. One of these engines has been known to transport at one trip 260 piculs of hemp, or an amount that would require about forty bull carts to transport.

The exportation of hemp from this prov-

## BAILEY LAW PICKINGS

### Secretary of State has Increase in Receipts due to Auto Registration Fees.

Secretary of State O'Brien of New York has found that the Bailey law will add considerably to the earnings of his office. During the last month the receipts of the department were the largest in its history, aggregating \$7,764, as against earnings of



Scene of the Mcreddy-Percy Automobile Camp, Near Ithy, on the Gordon-Bennett Course.

ince during the year has been in the neighborhood of 500,000 piculs, for which the people have paid about \$12,500,000, local currency. The production of ylang-ylang for the year just closed was valued at about \$55,000, copra at \$300,000 and sinomay at \$3,250,000. In closing Mr. Betts says:

"This province opens a wonderful field for the introduction of American supplies and implements, and it is sincerely hoped that American manufacturers and merchants will take advantage of these new markets."

"How to Drive a Motorcycle." See "Motorcycles and How to Manage Them." \$1. The Goodman Co., Box 649, New York. \*\*\*

\$6,017.64 for the corresponding month last year and \$3,885.61 in 1899, showing that the earnings have practically doubled in five years.

Considerable of last month's increased earnings were due to the issuance of automobile certificates under the Bailey law. Since this law went into effect, on May 15, the Secretary of State has issued in the neighborhood of 2,000 automobile certificates at \$1 each, this number including about 500 operators' certificates. The certificates are being issued at the rate of about a hundred daily.

Harry D. Corey, the well known Boston banker motorist, is among the Americans who will witness the Bennett Cup race.

## MAKES PERMANENT RECORD

### French Speed Indicator That Shows Length of Trip, Time and Speed Rate.

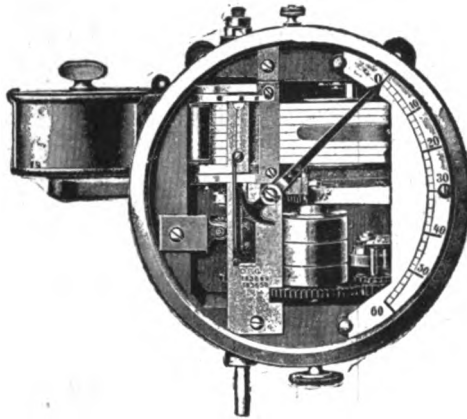
All motorists who have had experience with speed indicators have recognized the desirability—almost the necessity—of a method of construction that would enable a permanent record of the speed to be made. It frequently happens that such a record would prove of great value, as, the accuracy of the instrument admitted, it would establish beyond a cavil the reliability of the motorist's statements. A recording instrument is therefore doubly useful. It obviates the necessity of guessing at one's speed, and it preserves a record of the rate of speed from the time the car starts until it stops.

An instrument which accomplishes all this is the Improved Speed Indicator, a new importation of Charles E. Miller, No. 97 Reade street, New York. Its mechanism consists of a shaft with a transmission pulley connected to the wheel by a flexible shaft connection, and the indicator is arranged with internal gear, according to the sized wheel the instrument is to be used for. It has two eccentrics for the automatic winding up of the apparatus while the car is moving. The shaft is fitted with a worm gear which operates the clockwork and records on the coil of paper the rate of speed at which the car is travelling per hour, while the indicating hand shows on the dial the exact speed at which it is travelling. The dial is graduated from 0 to 60 kilometres per hour, and the hand indicates the speed every three seconds by means of a pin which perforates the strip of paper. The kilometre apparatus punctures on a red line by means of a pin which perforates the strip of paper. The kilometre apparatus punctures every 250 metres, so that four punctures equal one kilometre, as shown in the above diagram. The paper roll, which is 25 metres long, is sufficient for 80 hours, and is transported by two rollers independent of the clockwork, which at the same time indicates the minutes. This instrument records the speed by a line drawn on the paper, rising and falling according to the rate of speed the car is travelling.

The record taken shows the length of the trip taken, in kilometres, time consumed in

minutes, and the speed at any time and any given point.

With a device of this kind fitted to one's car it would be possible to gauge the rate of speed throughout the entire run. Many motorists would find a permanent record of this kind valuable as well as interesting. The Long Island constable afflicted with the "sixteen seconds" habit would have to



scratch his head to find a way of getting around testimony of this kind, and his credibility could well be attacked when there is such evidence on the other side.

### The Art of Chisel Using.

A chisel is a tool which does not figure in every automobilist's outfit, yet it is one of those tools which when it is wanted is wanted badly. The usual "cold chisel" is made of octagonal cast steel in sizes which vary from one-half inch to one inch in section and about six and one-half inches long.

To get a thoroughly reliable tool it should be forged, hardened, ground and tempered by an experienced toolmaker. Though it looks a perfectly simple job to use a chisel, when the novice comes to handle it, unless care is taken, sore hands and barked knuckles invariably follow. All that is required is a steady hand and eye. Put the edge of the chisel where the cut is to begin and strike a deliberate blow fairly on the head. The chief thing to observe is to hit the chisel squarely upon the head, so that the full force of the blow is delivered to the cutting edge. If the blow is struck the least bit sideways the force is at a greater or less angle to the cutting edge, the result of which is the tool jumps from the work, and a piece of skin frequently flies off the left hand or the edge of the chisel is broken off.

## FOR NORTHERN NOVICES

### Instructions for the Operation and Care of the Popular Detroit Car.

Intending purchasers of automobiles frequently ask, "Shall I be able to operate and care for this car?" thus plainly expressing fear as to their ability to do so. To such prospective motorists the Northern Mfg. Co. have a ready answer in the book of instructions which they have just got out. It tells everything that the owner of a Northern car should know, and tells it in a plain, straightforward manner, stripped of technicalities, and in an exhaustive fashion that is a refreshing contrast to much catalogue work. From the index on the first page to the list of "don'ts" on the last the pamphlet is all that could possibly be desired.

With painstaking minuteness the novice is taught how to proceed in every stage of his apprenticeship. Each section of the mechanism is taken up, described and illustrated. The appended paragraphs will show the thoroughness with which each step has been handled:

"Starting Motor.—See upper drawing on opposite page. (1) Throw on switch; (2) turn on oil; (3) draw starting crank (H) slowly toward you until it engages the ratchet on main shaft; (4) press down on relief lever (K); (5) turning starting crank (H) over compression. The moment the first impulse takes place release relief lever (K) and drop starting crank (H). The starting crank should normally remain at position indicated in drawing.

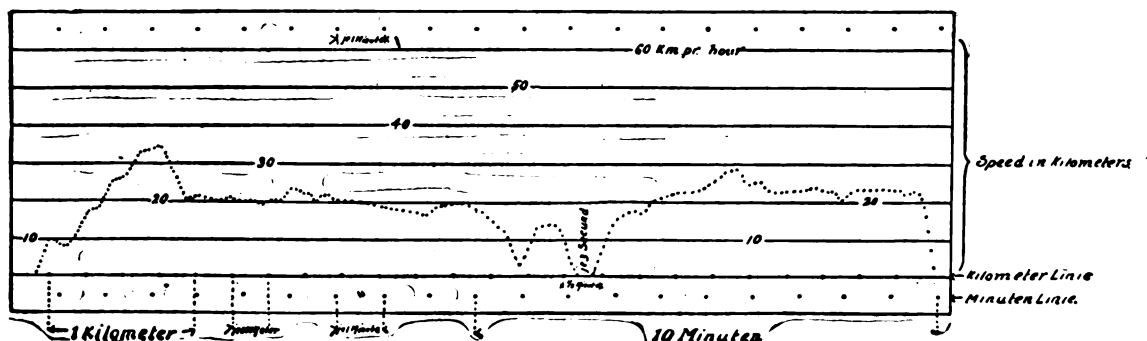
"If the motor fails to start readily unscrew needle valve (O) about a quarter of a turn, and immediately crank the motor, and if the motor then starts return needle valve (O) to its original position. (See "Vaporizer.")"

A "quick oiling list," on cardboard, is inclosed with the book, and should be tacked up in a prominent place by every Northern user, as it will save him much cogitation and tell him what parts need oil and when.

The book is incased in a stout linen cover designed to withstand hard usage.

### Will Make Cars in Grand Rapids.

Walter S. Austin, of Grand Rapids, Mich., has purchased a building on South Division street, stocked it with machinery, and will begin the manufacture of an automobile of his own design.



## CHAUFFEUR'S STATUS

### Hotelkeepers Wish to Know Where to Place Them During the Meal Hour.

A new "chauffeur problem" is now bothering excursionists and tourists—and that is what to do with the hired operator at the road hotels at meal time. It may be said that this question bothers the hotelkeepers more than it does the automobilists. It is also a source of vexation to the chauffeurs themselves. It involves the question of the chauffeur's social status. He feels socially above a coachman, and is generally so held, yet the hotelkeeper is unable to treat him better, and this the chauffeur won't stand for. His employer seems to be helpless, unless he makes him his companion at dinner.

For illustration: A touring party of, say, four and chauffeur drives up to one of the better class road houses around New York. Dinner is ordered for four. The innkeeper asks at once, "Will the chauffeur dine with the party?"

"Certainly not," says the gentleman who owns the car. "Put him at another table."

"But I cannot do that," says the innkeeper. "My other patrons object to chauffeurs dining in the room with them unless they are a part of a touring party."

Thus the chauffeur is placed in an unpleasant position. Oftentimes he is not aware that any lines have been drawn between his employer and the innkeeper as to his status in a public dining room. He awakens to the situation when he is shown a separate room and informed that it is "the chauffeurs'" dining room. Immediately he gets on his dignity, and nine times out of ten refuses to eat in a special room.

He complains to his employer later perhaps about the treatment he received at the inn, and refuses to go there any more. If he is a good man the employer is in a bad predicament, because really good chauffeurs are hard to replace. Thus the matter stands, rather complicated all around.

A talk with several innkeepers about New York shows that the same situation has come up in all the better class hotels where motorists go to dine. James B. Regan, who runs the Woodmansten Inn, has tried to solve the problem by building a dining room for chauffeurs near a place which has been set apart for machines stopping at the inn, but Mr. Regan says many of the chauffeurs who do not dine with their employers positively refuse to dine in the room set apart for them.

Aside from the social feature of this problem, there is another phase. Many times the chauffeur is driving, not for a private employer, but for a firm of automobile dealers. The parties in the car may be prospective purchasers to whom some member of the firm is demonstrating the car. In such a case the chauffeur is more of a "demonstrator" than a chauffeur. He is, perhaps, well educated, and, although a practical me-

chanic, is above the grade of an ordinary chauffeur. For business reasons he probably would not sit down at the table with the member of the firm. He knows that the conversation at the table between the agent and the prospective customer will likely be of a confidential nature, and that it would be better for both parties if he were not at the same table.

Consequently he takes a seat, possibly in the same dining room, but at a distant table. To the innkeeper he looks like a regular chauffeur—that is, he is just as dirty—and it would take an expert to tell that he was "a demonstrator." It would be almost impossible to make the average innkeeper understand the distinctive position he occupied, and it would likely be utterly impossible for the keeper to explain to his patrons that the dirty person at the next table was not a chauffeur, but rather "a demonstrator." Where the complication is going to end remains to be seen.

### Two Cycle Engine's Double Advantage.

A French engineer who has been studying the two cycle engine finds that with it the consumption of gasoline is reduced, while there is much less tendency to overheat. To carry out his experiments he built himself a double cylinder two cycle motor and fitted it to a car. The engine develops 15 horsepower at a speed of 900 revolutions a minute; the cranks are set at an angle of 180 degrees to each other. There being an explosion at every revolution in each cylinder, there are 1,800 explosions or impulses a minute. He thus claims to get the same result from two cylinders as from a four cylinder engine of the ordinary type.

### On South African Roads.

A business trip of 440 miles by motor car has just been made by D. Menzies, a Cape Town motorist. The places visited included Caledon, Hermanus, Staddford, Napier, Bredasdorp, Swellendam and Worcester, and by the ordinary railway and Cape cart the journey would probably have occupied eighteen days. On the coast road near Hermanus Mr. Menzies had to drive the car through twenty miles of heavy wet sand, both he and his passengers having to get out of the car and walk.

### Twixt Devil and Deep Sea.

The British motorist may well ask where he is "at" in the matter of speed. One of the fraternity, driving a number of newspaper men reporting a walking contest, was ordered to go faster by a policeman, who added that the slow pace of the car was resulting in a blocking of the traffic.

### The Kaiser Designs a Car.

The Kaiser is proving himself to be an Admirable Crichton. Not satisfied to drive automobiles, he is building a car of his own design. It is to have only 8 horsepower, to seat but three persons and to be driven by a two cylinder engine.

## CUM GRANO SALIS

### Continued Reports of Land Purchases for Long Island Speedway Lack Probability.

Despite the fact that nothing definite has been heard from the members of the Automobile Club or others concerning the automobile speedway on Long Island that was projected last fall, and notwithstanding this statement of General Roy Stone, to the effect that he had consulted with President Shattuck and others and learned that nothing definite was being done in the matter, there crops out every now and then in the daily papers some item about the purchase of ground in Queens and Nassau counties which has been acquired for the purpose of the speedway. The latest news of this sort is that the Marshall farm, on the Black Stump Road, near Jamaica, has been bought by W. K. Vanderbilt, Jr., and those associated with him, to be used as a section of the proposed speedway.

This and other stories of the sort continually suggest that something is being done, and yet it is quite likely that the purpose of the purchases is mere guesswork on the part of the local reporters. Mr. Vanderbilt has been busy for some time acquiring land in the vicinity of Success Lake, Long Island, and there is no telling the extent of his plans. Then, again, a new racetrack is being laid out by the Belmonts on the Hempstead Plains, and undoubtedly there has been a great deal of activity in real estate inspired by this circumstance.

One thing that is suspicious in connection with the rumors, and which suggests that the talk of the speedway is due to reporter's imagination, is that all the land acquired has been in the same locality in Queens and Nassau counties, and that nothing is heard of acquisitions further along the projected route.

### A Noteworthy Restriction.

At the June 15 session of the Indianapolis City Council an ordinance was introduced forbidding the erection or establishment of automobile stations or livery stables upon any block on which are located three or more dwelling houses without obtaining the consent of a majority of the property owners. This ordinance, so 'tis said, is aimed directly at the Indiana Automobile Co., who proposed to establish an automobile warehouse on North Meridian street, fronting University Park. At the same session it was expected that the Finance Committee would report on the boulevard bond proposition—but nothing was done.

### Omaha's Picturesque Appellation.

"Scoot wagon" is the latest, but not the best. It comes from Omaha, where the packing houses are.



SURREY, 12 HORSE-POWER, \$1800 Front head-light extra..

# THE HAYNES-APPERSON

Is the **ONLY** gasoline automobile that ran the contest from New York to Boston and back without repairs or adjustments of any kind.

*It is the only machine that has won EVERY Endurance Contest held in America and every contest or race ever entered.*

## 17 Records and Awards all earned by Stock Machines.

The machine *you* buy is the kind that makes this **Absolutely Unequaled Record.** Our catalogue gives the records complete. Send for it and ask for the "Little Book," too.

Inquirers are urged to visit our factory where every detail of Haynes-Apperson superiority can be seen and fully understood.

**HAYNES-APPERSON CO., Kokomo, Ind., U.S.A.** *The oldest makers of motor cars in America.* Branch Store, 1420 Michigan Ave., Chicago.

Eastern Representatives: Brooklyn Automobile Co., 1239-41-43 Fulton Street, Brooklyn, N. Y., and 66 West 43d Street, New York.

National Automobile & Manufacturing Co., Pacific Coast Agents, San Francisco.

JOHN MAXWELL, Oneida, N. Y., Agent for Central New York.

*Locomobile*

*Easily the best built car in America*

Our GASOLINE CARS are thoroughly developed. NO EXPERIMENT. For instance, the model herein illustrated has been in regular use for over a year. We build 9 H. P. and 16 H. P. cars, using front vertical motor exclusively.

"I have driven the car nearly two thousand miles and it is running better every day. For strength of construction, ease of adjustment and smoothness in running, I think it is without equal among American cars."—From a Customer.

**The Locomobile Co. of America,**  
Head Offices and Factory, Bridgeport, Conn.

BRANCHES: 76th St. and Broadway, New York. 13 Berkeley St., Boston. 249 North Broad St., Philadelphia. 1354 Michigan Ave., Chicago. 39 Sussex Place, South Kensington, London.

### The Cost of Speed.

Those who wish to pursue their motoring on the most economical lines should always bear in mind that, broadly speaking, the slower the car the less expensive will be its upkeep, observes the Autocar. Not only is the vehicle far less strained and knocked about if it is driven at a very moderate rate, but, still more important from a monetary point of view, is the fact that the tires suffer so much less.

It is astonishing how very small the expenses for renewals are with low powered machines. We are convinced that many who are most desirous to indulge in motoring are forcing the manufacturers of low priced vehicles on to entirely wrong lines—that is to say, while they want a car at a very moderate price, they also demand fairly high speeds. This is all very well so far as it goes; but it must mean that the upkeep and renewal charges will be higher than they like. If they would be content with a pace of fifteen or sixteen miles an hour they would find there was no difficulty whatever in meeting their requirements as to very moderate expenditure; but, as it is, the demand for fast pace is such that the makers are almost compelled to gear small light cars higher than is desirable.

Then, again, as the first cost must be considered, the tires are none too large for the work they have to do, and what the buyer saves in first cost from these small tires he very soon loses, as he finds that it is necessary to carry a spare cover besides two or perhaps more air tubes, and he also discovers that his back tires, at any rate, are not long lived even then. If he would face the extra cost at the beginning of large tires he would be far better off in the long run.

In fact, with many light cars and volturettes now being built there is no doubt that the purchasers would do far better if they would make up their minds to specify a gear giving a low top speed and to go in for large tires. For instance, if 3½-inch tires be used on a car which weighs from five to eight hundredweight, they have a remarkably long life, as these same tires are not infrequently fitted to cars of twelve hundredweight and even eighteen hundred-

weight. Of course, the same remarks apply to larger cars—that is to say, there is no better plan than to fit light car tires to a volturette and heavy car tires to a light car. At least three-fourths of the tire repairs are entirely due to overloading the tires.

### Out of his Glass.

"My son," said the motorist to his son, who was spending too much money at college, "do not make the mistake of overestimating the horse power of my income.

"I am an ordinary, middle class, twelve horse power parent. I belong in the touring category.

"Evidently you think I am a ninety horse racer, to judge from your bills. Get that idea out of your mind. Shut off the power a little. Go slower. Come off the top speed and burn less fuel.

"Stop in your garage a little more, and don't try and keep up with young men of greater horse power than yourself. You cannot do it.

"Just remember that you are a twelve horse power person, and keep in your class, and you'll be much happier and have fewer accidents."

### Hetty Green, Motorist.

Hetty Green, the woman financier, is an automobilist, and, of course, the dailies find a sensational item in it. Mrs. Green is quoted as making some very sensible remarks in connection with her use of a motor car. She says:

"Some people who do not know me or my fondness for progressive as well as practical things may be surprised at my advocating what some still choose to call a fad. But since my son purchased a motor—they say it is correct to call them motors—I have discovered the practical as well as the pleasant side of automobilism. Are they dangerous? No more so than horses and carriages. More people are injured every day by runaways than in a week or month by automobiles."

Sunday, June 14, was made a red letter day among the car owners of Louisville, who, getting together most brotherlike, held a pleasant all-day-long country run to Shelbyville. The affair yielded much pleasure—and dust.

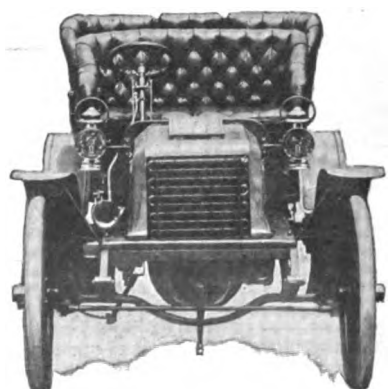
### Chicago Photographer's Peregrinations.

Some interesting exploits in automobilism in the line of long distance touring are never brought conspicuously into the limelight, and undoubtedly motor cars are being used for long pleasure trips by private individuals who do not care for publicity to an extent that is not generally suspected.

Now and then the news of one of these retiring tourists is unearthed in some out of the way place. From Tacoma, Wash., for instance, comes the story of an automobile that presented a peculiar appearance and was managed by a man in blouse and overalls, attracting attention in the street and exciting the curiosity of a reporter. The vehicle was more like a freight carrier such as is used by business houses for delivery purposes than an outing machine. There was ample space for the reception of large bundles, boxes and other stuff, all of which appeared to be destined for customers of a department store.

When followed up by a reporter the mystery dissolved itself into a simple case of cross country travelling by an enthusiastic roadster, who has taken this means of acquainting himself with his country. The traveller is C. H. Allerhorn, one of the best known photographers in Chicago. He is out for recreation, but is at the same time not neglecting to add to a fine collection of views from all over the country which he has been gathering for the last eight years.

Said Mr. Allerhorn while stopping to oil his machine: "I am not trying to break any record. I have not a fast machine, but I am going just as the whim seizes me and just as slow as I want, and, I assure you, not any faster than is compatible with my comfort. I have been out from Chicago just two months and two days. I have no idea exactly which way I shall return—perhaps north, perhaps south, perhaps in a straight line—whichever way I think I shall obtain the nicest views. So far I have collected a little over 1,600 on my present trip, a substantial addition to the 12,000 I have at home mounted. I expect before I get through with this trip to bring my collection up to 20,000. I have taken them all myself. It is a hobby with me, but I shall put them to practical use some day."



## THE PREMIER

appeals to posted buyers who  
are looking for good value,  
and a High Class Touring Car.

**\$2,500.00**

**Premier Motor Mfg. Co.,**  
INDIANAPOLIS, IND.





## TOURING REQUISITES

## Roomy, Comfortable Seats and Baggage-Carrying Capacity Desiderata—French Methods.

When a tour is made in an automobile the daily trips are longer and the average speed is generally higher than in ordinary pleasure runs, and to avoid any discomfort of the tourists the seats must therefore be particularly roomy and comfortably upholstered, and special means must be provided for protection from the inclemencies of the weather, mud thrown off by the wheels, etc. Unusual road difficulties are frequently encountered in touring, and a touring car must be of relatively higher power than a vehicle for town use. The majority of the better known touring cars leave nothing to be desired as regards power, so long as the engines are in good order. Where the present touring car is more or less defective is that it does not provide room for the many things usually carried along on a tour. With many automobilists an extra tire or outer cover is one of the most essential extra parts to be carried, and frequently the only manner of carrying the tire is to strap it either to the front or rear of the body, where it is rather too conspicuous to suit the taste of the æsthetic user.

In France numbers of touring cars have been built with a Limousine body, the top of which is surrounded with an iron railing to serve for carrying extra tires and luggage. This arrangement provides a fairly suitable and inconspicuous place for the tires. In cars with ordinary tonneau or two-seated body the best place for the tires undoubtedly is beneath the floor of the body in the rear, provided that space is not occupied by some other part, as, for instance, the muffler or the water tank.

Owing to the impossibility of carrying dress cases, etc., on some cars, it is not uncommon for tourists to send a trunk along by rail, but it is hardly necessary to say that this method is far from being ideal. The luggage question for touring cars can be solved in two different ways—viz., the body of the vehicle may be provided with compartments for storing the various articles it is desired to carry along or provision may be made for strapping a neatly fitting trunk, readily removable. The latter would really seem to be the preferable plan, as it would allow of the trunk being carried into hotels at stopping places and would leave all the room of body compartments for extra parts and tools, which must be carried in considerable number on long trips.

## Dislodging a Sticking Bolt.

An instance where a hammer should be used carefully is in dislodging a bolt which fits somewhat tightly in its orifice. When the nut is completely removed careful aim should be taken with the hammer, and one sharp, decisive blow given to the bolt direct-

ly upon the top and with the centre of the face of the hammer.

It is, of course, perfectly clear that, if the bolt be struck at all sideways the screw thread will be burred and prevent the nut being again replaced until the thread has been restored by means of a triangular file or by the edge of a square file, methods which do not conduce to the satisfactory working of the screw thread. Where possible it is far better to slack off the nut until the top is level with the top of the bolt, with at least one-eighth of an inch intervening between the top of the nut and the face of the piece, when so much care need not be exercised, as there is no danger of spoiling the thread.

In some cases it is even advisable to screw the nut half way off the bolt and deliver the blow on to it rather than spoil the thread itself, but it will be understood that it is injudicious to deliver heavy blows in this instance, as the force of the blow would be borne by three or four threads only.

## Lubrication and Compression.

An important point, and one which is frequently overlooked even by quite experienced chauffeurs, is the relationship of lubrication to compression. When an engine is being efficiently lubricated there is a film of oil between the piston, piston rings and cylinder wall which makes the joint sufficiently tight to prevent escape of mixture to the under side of the piston, and so serves to maintain compression. If this film is absent or inconspicuous there will be loss of compression, and since the oil is being continuously used up, it must be replaced at the same rate at which it is consumed.

When an engine is first tested at the works before the car is delivered to the purchaser it is literally "swamped" with oil, a proceeding to which was due the discovery of the action of the spark gap at Panhard's works. The plug, of course, speedily becomes foul, and, as is now well known, an observant workman noticed that when a small external gap existed in the high tension circuit a spark occurred simultaneously at the plug, no matter how sooty the points happened to be.

## Aqua Ammonia a Good Extinguisher.

Aqua ammonia is an excellent extinguisher for a gasoline fire. This was illustrated by an incident which occurred in Savenay, France, where the vapors from a tank containing fifty gallons of gasoline caught fire. A druggist, whose shop was next door, seized a demijohn containing a gallon and a half of ammonia water and threw it into the room where the fire was, breaking the demijohn. According to the report, the fire was almost instantaneously extinguished, and workmen who entered the room a short time after found the iron gasoline tank intact.

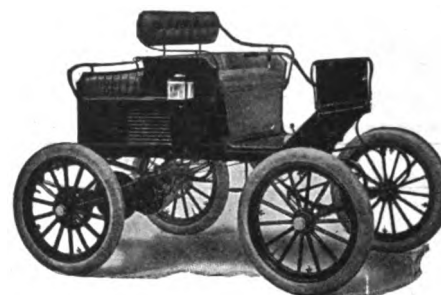
Manchester, N. H., may have an automobile club. Several prominent automobilists there—Messrs. Hurst, Parker, Green and Clough—are talking it up.

## NATIONAL ELECTRICS



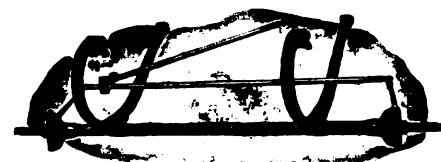
Model 75. Price, \$1000.

Choice of physicians and others wishing ease of entering and alighting.



Model 110. Price, \$1250.

This is our four-passenger vehicle. Practical for either two or four persons. Meets the demand for a convertible two or four passenger Auto.



Front System.

When you see these springs you know it's a National. Strength, comfort and beauty are combined in this part. Examine both front and rear systems of the National before you invest.

GET OUR CATALOGUE.

National Motor Vehicle Co.

1400 East Twenty second Street,

INDIANAPOLIS, IND.

## The Week's Patents.

730,519. Sparking Mechanism. Joseph S. Dikeman, Torrington, Conn., assignor of one-half to Charles S. Dikeman, Torrington, Conn. Filed Jan. 3, 1903. Serial No. 137,730. (No model.)

Claim.—1. In a sparking mechanism, the combination with a stationary and a movable contact point, of a cam lever for moving the contact points together, a spring for separating the contact points, a cam for moving the lever to permit the operation of the spring and means for adjusting the position of the cam toward and away from the cam lever to vary the time of sparking, and a push rod connected with the cam to permit the movement of the cam and consequent separation of the contact points.

730,548. Wheel. Edward W. Mackenzie-Hughes, Westminster, England. Filed Jan. 26, 1903. Serial No. 140,634. (No model.)

Claim.—1. The combination of a hub made in two parts, each part having radial grooves on one face, spokes fitting into the grooves, tubes or ferrules fitting into annular slots concentric with said radial grooves, and means for maintaining said tubes or ferrules in the annular slots.

2. The combination of a hub made in two parts, each part having radial grooves on one face, spokes fitting into the grooves, tubes or ferrules fitting into annular slots concentric with said radial grooves, means for maintaining said tubes or ferrules in the annular slots, a bush concentric with said hub, a flange on said bush, and means for maintaining one side of the hub against said flange.

730,608. Carburetting Device for Internal Combustion Engines. Alanson P. Brush, Detroit, Mich. Filed March 7, 1902. Serial No. 97,107. (No model.)

Claim.—1. In a mixing device the combination of a case formed with a passage, a baffle plate in said passage, a fuel supply channel communicating with said passage, valve attached to the baffle plate and simultaneously movable therewith to control said communication, and a yielding stop to limit the movement of the baffle plate and valve, said baffle plate and valve having a limited movement independent of the yielding stop.

30,626. Internal Combustion Engine. Frithiof G. Ericson, Stockholm, Sweden, assignor to Aktiebolaget Svenska Motor-Och Naf-Fabriken, Stockholm, Sweden. Filed August 14, 1902. Serial No. 119,628. (No model.)

Claim.—The combination with a four stroke internal combustion engine, of a cam disk provided on the one of its side faces with a cam slot consisting of two symmetrically arranged parts, the one of which operates the exhaust valve at the right time when the engine runs in the one direction, while the other part operates the exhaust valve at the right time when the engine runs in the opposite direction, substantially as and for the purpose set forth.

730,649. Carburetter for Explosive En-

gines. Carl O. Hedstrom, Portland, Conn. Filed May 10, 1902. Serial No. 106,719. (No model.)

Claim.—1. In a carburetter, a hollow cylinder constituting a mixing chamber provided with outlet and inlet openings at opposite ends thereof; a flange on the interior wall of said chamber, a tubular valve member for said outlet opening fitting closely said chamber and seated on said flange; a tubular extension of reduced diameter on said valve member, air ports through the wall of the valve member and flange communicating with an air passage between said tubular extension and the wall of said chamber, whereby the rotation of the valve member will increase or diminish the area of said air ports coincidentally with the increase or reduction of the area of the outlet opening, together with a suitably connected supply nozzle located within said tubular extension of the valve member.

730,683. Gas Engine Reversing Gear. Milton H. Neff, Watertown, N. Y. Filed Oct. 7, 1902. Serial No. 126,310. (No model.)

Claim.—1. The combination with an eccentric shiftable for the purpose specified, of a sliding member in connection with the eccentric to shift it, an eccentric rod, means for transmitting the movement of the eccentric rod, such means including a part shiftable in time with the eccentric, a second sliding member in connection with said part, and means for moving the two sliding members in unison.

730,695. Explosion Engine. Maurice Pivert, New Orleans, La. Filed June 5, 1902. Serial No. 110,312. (No model.)

Claim.—1. In an explosive engine, a cylinder comprising a body having a semi-circular lower end and provided with a semi-circular cover for said lower end, the semi-circular lower end of the body and cover being provided with oppositely arranged pairs of apertured and registering lugs, the body of the cylinder being also provided with a laterally projecting lug at its upper end and with a similar lug at its lower end on the same side and between a pair of lugs on its semi-circular portion, eyebolts in the registering lugs of the body and cover of cylinder, eyebolts in the tubular lugs of the body, and clips for attachment to a bicycle frame and to said eyebolts, whereby provision is made for securing the cylinder either to the centre brace or to the upper and lower braces of a bicycle, as set forth.

730,860. Electric-Motor System. George O. Baker, New York, N. Y., assignor to General Electric Company, a corporation of New York. Filed May 10, 1901. Serial No. 59,601. (No model.)

Claim.—1. In an electric motor circuit, a circuit-breaking device having two stationary contacts, a movable contact which completes the supply circuit through the two stationary contacts, and an auxiliary contact which becomes electrically connected to one of the stationary contacts by the movable contact whenever said movable contact is actuated to open the supply-circuit, thereby closing a local circuit through the motor.

730,891. Means for operating Alternating Current Electric Motors. Rudolf Eickemeyer, Yonkers, N. Y.; Rudolf Eickemeyer, jr., Carl Eickemeyer, and Mary T. Eickemeyer, executors of said Rudolf Eickemeyer, deceased. Filed July 6, 1894. Serial No. 516,724. (No model.)

Claim.—1. In an alternating current motor, the combination substantially as hereinbefore described, of an armature having an iron core, and affording electric circuits closed upon themselves, a field consisting of magnetic metal and coils continuously wound in closed electric circuit, and connected with the alternating main or supply circuit, and means substantially as described, which start the motor by intermittently short-circuiting parts or sections of the field coils which are unsymmetrically located with reference to the connections of the coils with the supply wire terminals, and leave said coils free from short-circuit, after the initial rotation of the motor armature has been accomplished, and self rotation assured.

730,893. Electrical Transformer. Augustine R. Everest, Lynn, Mass., assignor to General Electric Company, a corporation of New-York. Filed May 8, 1902. Serial No. 106,386. (No model.)

Claim.—1. The combination of a transformer, a casing therefor, a connection board carried by the transformer, a main cover for the casing, an opening in the main cover, permitting access to the connection board, and a supplementary cover for said opening.

730,930. Transmission Gear for Automobiles. John W. Lambert, Anderson, Ind., assignor to Union Automobile Company, Union City, Ind. Filed Oct. 9, 1902. Serial No. 126,564. (No model.)

Claim.—1. The combination of a frictional driving member, a frictional driven member mounted on a shaft, movable bearings for said shaft, a rock-shaft, adjustable bars connecting said rock-shaft to the movable bearings whereby the relative positions of the rock shaft and the shaft of the driven member may be shifted to secure the proper relative positions of the two driving members, a foot-lever, a bar connecting said lever to the rock-shaft whereby the driven member may be forced against the driving member, a depending rigid link supported on the shaft of the driven member, a pair of sprocket wheels mounted in the lower end of this link, a driving chain connecting one of these sprocket wheels to the shaft of the driven member, a driving means connecting the other sprocket wheel with the axle of the vehicle, and means for preventing any forward or rearward movement of the link at its lower end.

731,001. Explosive Engine. Edward E. Williams, Dayton, Ohio, assignor to W. P. Callahan & Co., Dayton, Ohio, a firm. Filed Nov. 7, 1901. Serial No. 81,378. (No model.)

Claim.—1. In an explosive engine, the combination with the mixture feed pipe for the engine, of a vaporizing chamber having at the bottom a liquid receiving and outlet

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trap, and at one side above the plane of said trap a horizontally offset ported valve casing in communication with the mixture feed pipe a controlling valve arranged within said casing, an oil feed pipe pendent vertically within the vaporizing chamber from the top thereof and delivering into the bottom receiving and outlet trap, and an air induction pipe in communication with the vaporizing chamber at one side thereof and in the horizontal plane of the ported valve casing, said air induction pipe delivering a supply of air into the vaporizing chamber and across the stream of oil falling into said trap, substantially as set forth.

731,022. Motor Vehicle. Patrick J. Collins, Scranton, Pa., assignor of one-half to Christopher G. Boland, Scranton, Pa. Filed Jan. 29, 1902. Renewed May 19, 1903. Serial No. 157,833. (No model.)

Claim.—1. In a motor vehicle, the combination with a pair of pivoted axles of a steering lever pivoted in front of the pivotal points of the axles and having rearwardly turned arms in sliding engagement with the axles.

731,086. Motor Vehicle. Charles B. Titus, Little River, Kan., assignor of one-half to Joseph Moore, Little River, Kan. Filed Sept. 22, 1902. Serial No. 124,414. (No model.)

Claim.—1. A motor vehicle comprising in combination, a wheeled platform of circular form, a motor carried by the platform and adapted to propel the vehicle, a relatively stationary frame having means at one end for detachably securing it to a road vehicle, a strap forming a part of the stationary frame and encircling the platform to permit revoluble movement of the latter in steering, and a steering mechanism carried by the stationary frame and controllable from the road vehicle.

731,174. Running Gear for Vehicles. Henry M. Glen, Seneca Falls, N. Y. Filed Nov. 11, 1901. Serial No. 81,922. (No model.)

Claim.—1. The combination with the vehicle truss, of yokes secured to the opposite ends of said truss, said yokes each comprising a vertical body portion provided at its ends with outwardly projecting horizontal arms, rotatable rock shafts supported in the horizontal arms of the said yokes, pneumatic buffers mounted on said rock shafts, said buffers being provided with interiorly arranged vertical tubes through which the rock shafts extend, concave bearing plates arranged on the said rock shafts above and below the said buffers, said lower bearing plates having axles formed integral therewith, and means for adjusting and retaining the said rock shafts in their adjusted positions.

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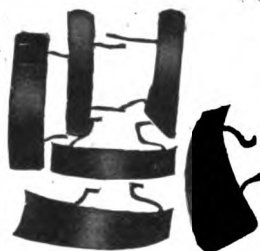


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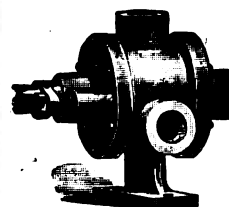
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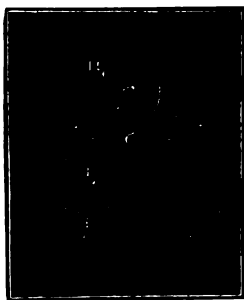
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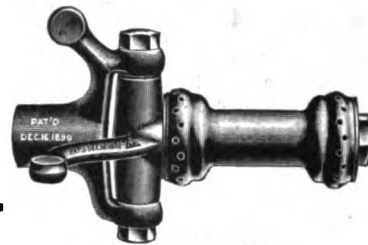
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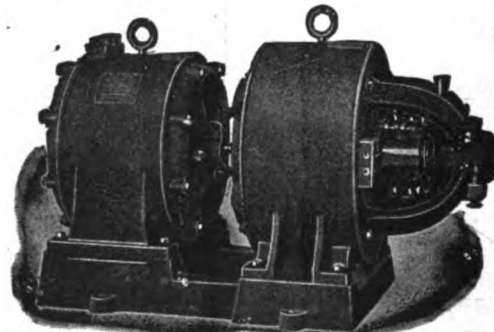
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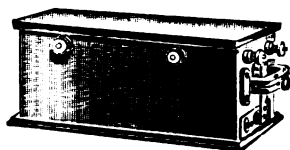
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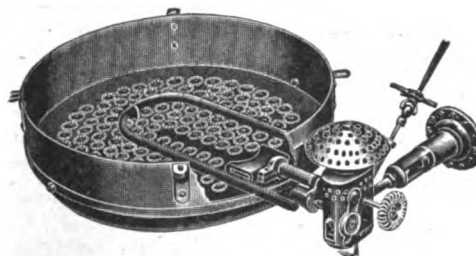


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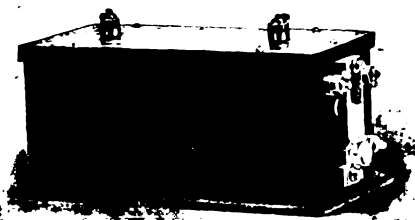
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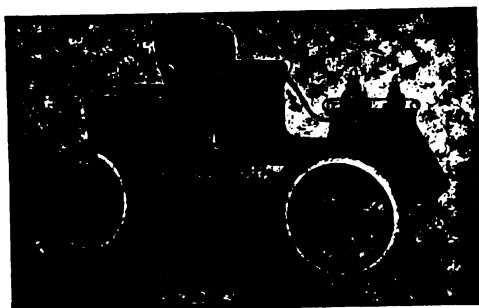
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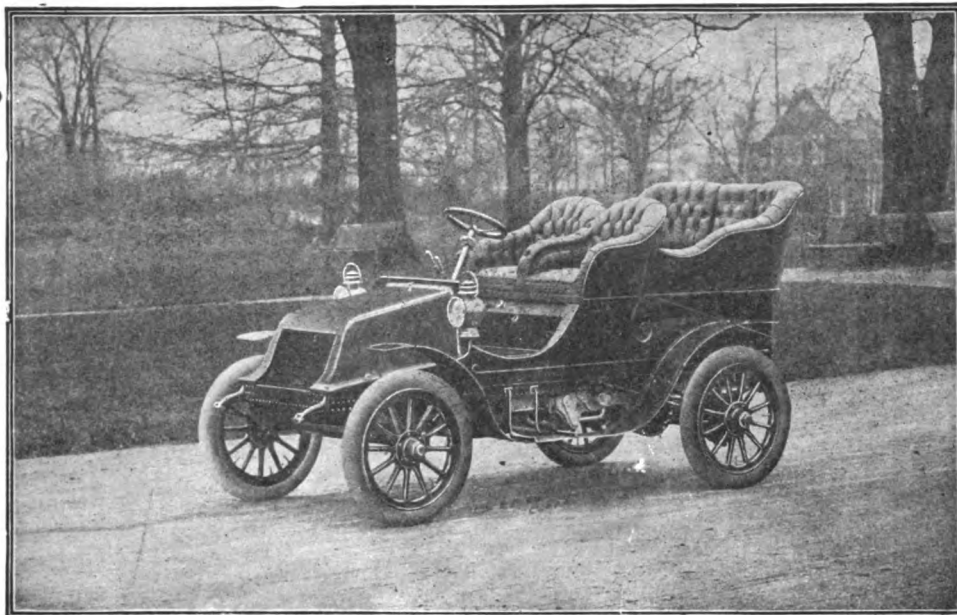
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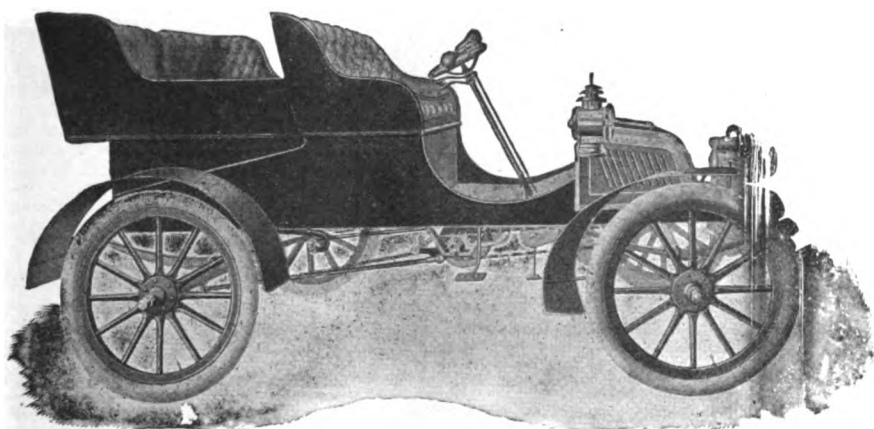
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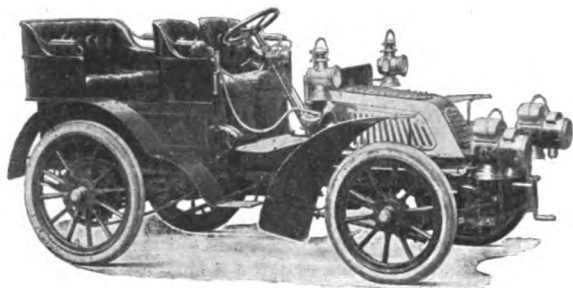
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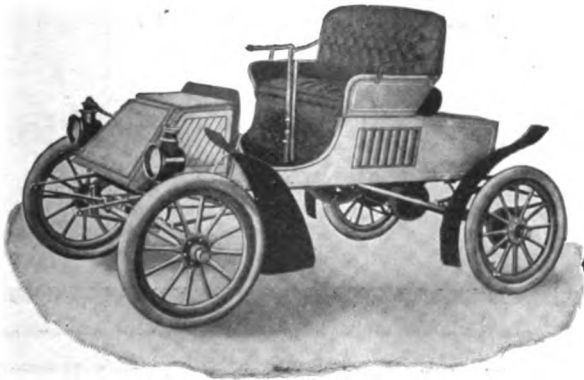
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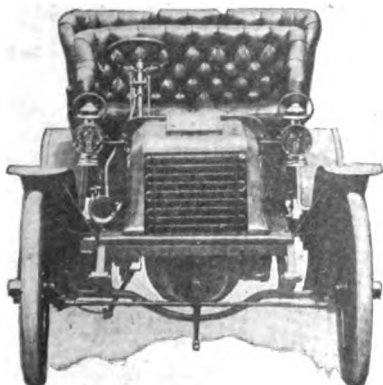


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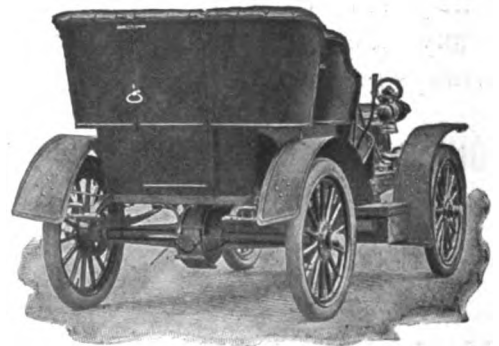


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MILES.	MIN.	SEC.
1	0	59 3-5
2	2	0 2-5
3	3	2
4	4	3 4-5
5	5	4 3-5

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are fast, reliable and easy to repair. They are the choice of well-posted men.

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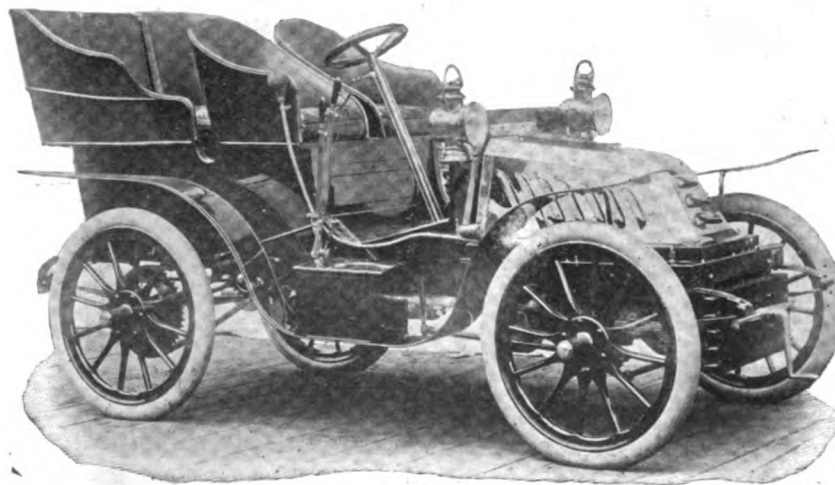
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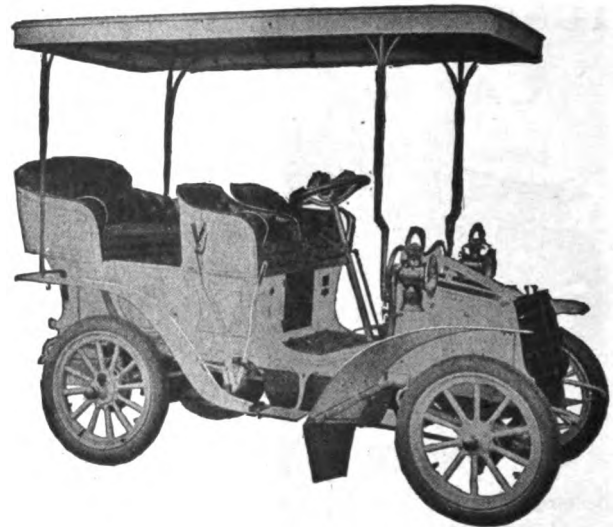
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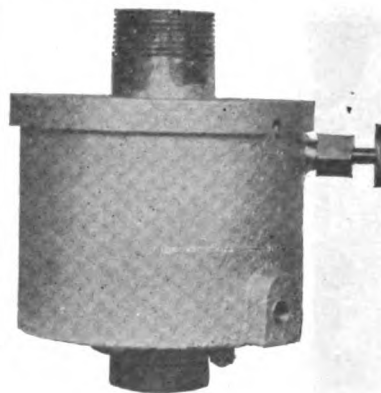
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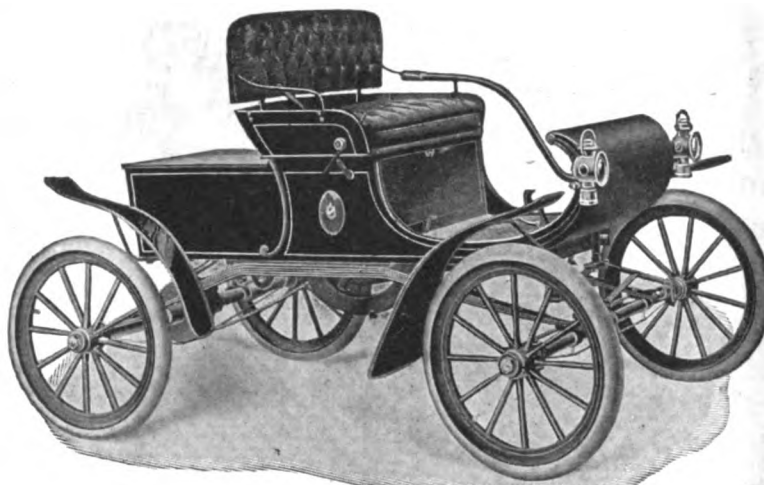
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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, July 2, 1903.

No. 14

## JENATZY WINS THE CUP FOR GERMANY

**The Belgian, Representing Teutons With Mercedes Car, Beats de Knyff by about Twelve Minutes—Covers Course in Nine Hours and Fifty-nine Minutes—Americans Show Poorly—Many Mishaps but None Serious—Winton in Trouble Before the Start.**

(Special Cable to the Motor World.)

Ballyshannon, Ireland, July 2.—Jenatzy won the great international race here to-day, and Germany becomes the holder of the Gordon Bennett Challenge Cup for the next year. De Knyff, of the French team, was second. Gabriel, De Caters and Farman came in next in the order named. Winton, Owen and Edge were hours behind, and Mooers was missing at the time.

De Knyff was the first one to finish the race, coming in at 5:35, and Jenatzy arrived two minutes later; but, as De Knyff had fourteen minutes' start on Jenatzy, the latter won by about 12 minutes. This is elapsed time.

The race was started promptly on time. S. F. Edge was the first sent away, at just 7 o'clock. Rene de Knyff was the second man off, starting at 7:07. Alexander Winton was scheduled to be the third starter, but he was late in arriving at the tape, and Percy Owen was sent away in his place, at 7:14. He made rather a poor start, but was greeted with a great demonstration of waving hats and handkerchiefs. The Irish people here had been hoping that an American would win the race. Jenatzy was the fourth to get away. The others followed seven minutes apart.

Jenatzy's gross time for the 368 miles 765 yards was 9 hours 59 minutes. His net time, with the control periods deducted, is 6 hours 32 minutes.

The start in detail was as follows:

1—S. F. Edge, England.....	7:00 a. m.
2—Chev. R. de Knyff, France....	7:07 a. m.
3—P. Owen, United States.....	7:14 a. m.
4—M. Jenatzy, Germany.....	7:21 a. m.
5—C. Jarrott, England.....	7:28 a. m.
6—M. Gabriel, France.....	7:35 a. m.
7—L. P. Mooers, United States....	7:42 a. m.
8—Baron de Caters, Germany....	7:49 a. m.
9—J. W. Stocks, England.....	7:56 a. m.
10—M. Farman, France.....	8:03 a. m.
11—A. Winton, United States.....	8:10 a. m.
(Pushed over line, but was not off until 8:50 a. m.)	
12—Foxhall Keene, Germany....	8:17 a. m.

Jarrott was smoking a cigarette as he crossed the line. Mooers made a poor start, the car being pushed across the tape. Winton halted the other side of the line (after his time had been taken, and lost forty minutes adjusting his carburetter. This gave him trouble all day. In the first fifty miles of the race his engine skipped badly, but after that he got it going grandly. By that time, however, he was eighty miles behind. I learned that the trouble was due to some oil accidentally getting into his gasoline yesterday. Winton himself has not learned of this yet and is at a loss to account for his carburetter troubles.

Edge led at the end of the first lap of about 103 miles. The best gross time, however, was made by Foxhall Keene, who covered the lap in 1:23. After that Jenatzy made the fastest time on each of the laps. At the end of the second lap Jenatzy was leading De Knyff by 4 minutes 23 seconds. In elapsed time he was ahead of all, the order of the others then being De Knyff, Farman, De Caters, Gabriel, Edge.

It began to rain at 1:30 o'clock, and the road became slippery. Jenatzy was the winner, barring accidents, from the second round on.

The fastest times were made over a measured one-mile stretch near here (Ballyshannon). The best time was made by Gabriel, 55 seconds for the mile. The fastest rates per mile over this stretch were: Edge, 66; De Caters, 64; Jenatzy, 64.

Jarrott broke his steering gear, and was thrown near Stradbally, on the first round, breaking his collarbone. Baron de Caters stopped near the grandstand to send word of the accident, so as to allay apprehension, as a report had spread that the English favorite had been fatally hurt.

Stocks collided with a fence in the first lap, and was so badly damaged that he quit. This left Edge the only Englishman in the race, and on the second round one of his tires burst, and he lost an hour.

Farman had to stop to make adjustments in the second lap, and so did Foxhall Keene. Shortly after completing the third round Keene had to quit because his axle was about to break. He had scored 100 miles in 4 hours 26 minutes, when he withdrew.

Gabriel, who was tipped as the sure winner of the race, did very poorly. Mooers is reported to have broken down near Athy. Owen and Winton were hopelessly distanced on the third round. Edge had a spill on a bad turn, but continued. The American

(Continued on page 517.)

## INTERNATIONAL CONGRESS

### Representatives Present From all Clubs Except A.C.A.—Outline of Proceedings.

Paris, June 19.—The inconvenience of international congresses is that as the proceedings take place in the language of the country in which they are held, it is not easy for foreigners, unless they are exceptionally well versed in this language, to follow the reports and discussions sufficiently to profit from them, and it is probably for this reason that the attendance of foreigners at the congress held this week at the French Automobile Club was not so great as might have been expected. All the clubs sent one or more delegates, except the Automobile Club of America, which was not represented at all. This is perhaps to be regretted, for, though American manufacturers undoubtedly do well to preserve their individuality and develop the automobile along their own lines, they would, at all events, find a great interest, and perhaps some profit, in making an occasional examination of the state of things on this side. No greater opportunity is offered of doing so than the international congress, which summarizes the whole position of the automobile pastime and industry in Europe.

The first international congress was held in Paris in 1900, when, coinciding as it did with the Exposition, it was of an extraordinarily successful character. During the three years that have elapsed since then the industry has been advancing by leaps and bounds. It is estimated that the French makers alone are turning out 15,000 cars a year. They are employing 45,000 men in the actual construction of vehicles, and if to these be added the number of hands engaged in the accessory department of the trade, such as manufacture of axles and springs, frames, carriage work and the like, as well as pneumatic tires, there are at least 180,000 men employed in the automobile industry.

Such progress must obviously suggest a great deal of interesting discussion, and, in fact, there was too much of it to be conveniently dealt with at a congress which lasted only three days. No fewer than sixty reports had to be got through in five sittings, thus making twelve each morning and afternoon. It was clear that such a mass could not be properly digested. The reports were barely summarized and the discussions were scampered through, so that the different questions were not thrashed out so much as they ought to have been. Still, the information supplied was most valuable, and there is no doubt that this interchange of ideas has done much to lay down the science of automobilism on broad and recognized lines.

It is, of course, impossible to go fully into the various matters that came before the congress. The proceedings will form a huge

volume, which may be consulted with advantage when it is published some months hence, but for the moment we will try to give some idea of the general trend of the industry as shown by the results of recent research and the suggestions offered for future development. At the first meeting the congress discussed the subject of motors, carburetters and igniters, which would alone have been sufficient to occupy attention during the whole three days, if only the congress could have sat long enough to go into the various matters thoroughly. As it was, these important problems had to be disposed of in three hours.

Steam engines and generators were reported on by M. Turgan, the maker of the well known Turgan et Foy steam trucks. It is hardly necessary to say that M. Turgan has great faith in the future of steam automobiles, but his opinion is coupled with certain reservations, some of which apply specially to France. The steam car should have liquid fuel, but in France the duties on kerosene are the same as on gasoline, so that the former is not sufficiently benefited to allow of the liquid fuel steam vehicle competing successfully with the gasoline car; at the same time M. Turgan is not satisfied with the present type of kerosene burners, especially on account of the difficulty of suitably adapting them to the steam generator. The makers of steam cars turn out good boilers and good engines, and the only thing needed to make the vehicle a popular success is the application of reliable kerosene burners and also the fitting of proper condensers. This latter point is the most important of all. People usually object to the steam car on account of the necessity of taking in supplies of water, quite overlooking the fact that this can be done mechanically in a few minutes; but still the objection exists, and it is very necessary for the steam car that it should be fitted with a condenser that will return a much larger proportion of the steam to the boiler. In light cars running at fairly high speeds this can be done without great difficulty, but in industrial vehicles the displacement of air is relatively so small that it is scarcely possible to condense at all. M. Turgan therefore proposed that the technical committee of the Automobile Club should carry out experiments with condensers in the hope that further research and a comparison between the different systems will provide the necessary solution. Some makers are experimentally adapting the principle of ice making to the condensation of the exhaust. If the solution can be found by this or other means no further objection can be raised against the steam automobile.

In the discussion that followed some of the members naturally brought up the steam turbine, M. Hospitalier being particularly favorable to a combination of steam turbine, dynamo and storage battery, and he seemed to be of the opinion that all further progress in the steam vehicle would have to be carried out in this direction. As the steam tur-

bine runs at excessively high speeds, the use of mechanical reducing gear is, of course, out of the question, and in view of the unfortunate experience with the Hellman locomotive and other devices for generating electricity by steam power the congress did not seem to participate in the hopeful views of M. Hospitalier. It inclined rather to the opinion of M. Turgan, that the steam car is already a very efficient and satisfactory vehicle, which only needs a good condenser to make it a success in this country.

### Garage not a Livery Stable.

That an automobile garage is not a livery stable was held last week by a Washington, D. C., judge, before whom a suit was brought based on this contention. Frederick B. Weston was charged with keeping a livery stable in a block where he had not secured consent of 75 per cent of the residents. The place is at No. 1,319 L street N. W., and there owners of automobiles can store their machines. Attorney Duvall, for Weston, made the contention that it did not come within the provisions of the law, for the reason that Weston's place was in no sense a livery stable, there being neither horses nor vehicles kept there, nor were the machines kept for hire. Judge Kimball took the matter under advisement, saying he wished to consult authorities, and this decision was the result. He decided that the defendant did not come within the law as charged in the information, and dismissed the case.

Assistant Corporation Counsel Pugh gave notice of applying for a writ of error, that he might carry the case to the Court of Appeals.

### Owner was Responsible.

A French court has decided against an automobilist whose machine exploded and set fire to a farm. The farmer claimed 62 francs 73 centimes (\$124.14). The driver admitted that he caused the fire, but claimed that it was not his fault. The court held that the explosion was caused by the bad construction of the machine or that it was overcharged with spirit, and insufficient precaution had been taken by the chauffeur, and gave the full amount claimed, including the odd centimes.

### Damage Verdict for Motorist.

A jury awarded \$500 to Herbert E. Smith, automobilist, who brought suit against the Jersey City, Hoboken & Paterson Railway Co., one of whose trolley cars recently collided with Smith's automobile, damaging both machine and rider. The case was tried on June 17 in the Jersey City Circuit Court. Mr. Smith sued for \$5,000—that is, \$300 for damages to the machine and the balance for personal injury, and so on. The jury gave one-tenth of the sum asked.

### Charging Station at Duluth.

Duluth, Minn., has a new automobile plant which the Evanston Electric Company has just established in that city. It has capacity for charging six cars at one time.

## MAKERS ASK HELP OF A.A.A.

### Go Over the Head of the Club for Supervision of Reliability Contest.

The National Association of Automobile Manufacturers has determined, if possible, to avoid the innuendo that certainly would attach to the award of medals in a reliability contest run by a committee of its own members and with its own members acting as checkers and observers. To avoid the criticism the N. A. A. M. has appealed to the A. A. A., and in doing so has incidentally hit the Automobile Club of America another slap by going over its head and implying that it recognizes the club only as a local body.

Action upon this matter was taken in connection with the report of the technical committee of the association on the proposition to hold a reliability run, and the executive committee on Wednesday voted in favor of holding such a run in October. The exact date will probably be about the middle of the month. The disinclination to co-operate with the club in such a matter expressed itself emphatically in the decision to invite the American Automobile Association to undertake the supervision of the run, appointing the observers, checkers and other necessary officials, and making the awards. Dr. Chase, president of the American Automobile Association, and A. R. Pardington were present at the meeting, and were in favor of the proposal, which will be laid before the executive committee of the association.

The run, as contemplated, will be over a route extending from New York City to Pittsburg, by way of Philadelphia, Baltimore and Washington. On reaching Washington the cars will return to Baltimore, proceeding thence to Hagerstown, Md., and from there to some point halfway between Hagerstown and Pittsburg. The time occupied will be five days. At Pittsburg several days will be devoted to inspection of the cars by experts, from whom certificates will be obtained as to their condition and as to hill climbing and other tests. The checking on this run, according to Manager Miles, will be done on a plan which promises practical results such as have not been afforded by any previous contest, and he anticipates a competition from start to finish which will be noteworthy in every respect.

The executive committee decided that it would not be advisable to have any contest of commercial cars this year.

The Bailey law came in for its share of discussion, and it was decided that in order to obtain an authoritative interpretation of the law as it relates to licenses and dealers it was advisable to make a test case.

Some consideration was given to the proposition for a steel speedway for automobiles on Long Island, and this will be made the

subject of a statement to be made in the near future.

### Seeks Damages for Non-Delivery.

L. S. Wheaton, of the New-Jersey Automobile Co., Newark, N. J., has brought suit against the Cadillac Automobile Co., of Detroit, Mich., for heavy damages alleged to have been sustained through the defendant company not living up to their contract and delivering motor cars according to order. The alleged damages were sustained during the connection with the firm of W. T. Stewart, as well as since his severance from it. Because of the alleged failure of the company to deliver cars, the Newark concern claims it was not able to satisfy the demands of its customers, and so purchasers went elsewhere. Since the withdrawal from the New Jersey Automobile Co. of Stewart the Automobile Co. of New Jersey, with which he connected himself, has claimed the agency for the Cadillac.

Wheaton is also suing the Autocar Co., of Ardmore, Pa., for damages, claiming profit on cars which his concern sold and which were never delivered to them by the Autocar Co. He also claims the profits for the business for 1903 in this district, claiming that the agency was his by contract, but that the Autocar Co. refused to deliver cars as they agreed to do.

### The Week's Incorporations.

New York, N. Y.—The Brown Motor Vehicle Co. of New York City, under New York laws, with \$2,000 capital. Directors—C. H. S. Brown and F. F. Goodman, New York, N. Y., and F. D. Homan, Jersey City, N. J.

Louisville, Ky.—The Motor Vehicle Co. of Jefferson County, under Kentucky laws, with \$10,000 capital. Corporators—R. W. Otter, J. Kemp Goodloe and E. B. Ayers.

Berwick, Pa.—Berwick Automobile Mfg. Co., under Pennsylvania laws, with \$10,000 capital.

New York, N. Y.—Pioneer Automobile & Campus Motor Co., under New York laws, with \$20,000 capital. Directors—H. V. Wyckoff, J. A. Hands and Cekar Campus, all of New York, N. Y.

### Exports Show Slight Decline.

The decline in automobiles and parts noted for the first time in the month of April, as compared with the corresponding month last year, continued in May, but was not so marked, the figures being \$144,271 for May last, as against \$148,647 for May, 1902. This was a loss of only \$4,376, while the loss in April was \$16,519. On the other hand, the month of May last showed an increase of \$9,591 over the preceding month. For the eleven months of the fiscal year the figures are \$1,038,792, as against \$817,378 for the corresponding period in 1902, a net gain of \$221,314.

### Kingman is Back.

J. A. Kingman, of the Locomobile Co. of America, has returned from his European trip.

## GOES INTO RECEIVER'S HANDS

### Shelby Motor Car Co. Finally Gives Up—The Liabilities Exceed Assets

Acting on the petition of J. J. Jackson, of Cleveland, John C. Fish was last Monday appointed receiver for the Shelby Motor Car Co., Shelby, Ohio.

The firm's liabilities are placed at \$60,000, with assets generously estimated at about \$50,000. The petitioner alleged that he feared creditors of the concern would bring suits against it, and thus entangle its affairs to a greater extent than could result under the direction of a receiver. In this connection it is interesting to note that it is the president of the company who has been appointed as the receiver.

To those conversant with the state of affairs existing for some time past, the news will occasion but little surprise. Liberal credit was extended the concern on the strength of alleged strong backing, but when accounts became due the only backing in evidence was done by the company, which avoided payment on one pretext or another until its creditors were in despair. The Shelby Motor Car Co. was the outgrowth of Beardsley & Hubbs, carriage builders, of Mansfield, Ohio, who started to manufacture the Darling gasoline car. They succeeded in interesting Colonel Cockley, former head of the Shelby Steel Tube Co., and it is said that it was largely on representations made by him that he and his friends would subscribe for the stock that the business was removed to Shelby and the Shelby Motor Car Co. organized. The death of Colonel Cockley upset these plans, and his executors declined to invest further in the concern.

Since that time the business has been carried on under the active management of V. N. Beardsley, the product being a convertible two and four passenger vehicle, with double cylinder motor, the explosion chamber being in the centre.

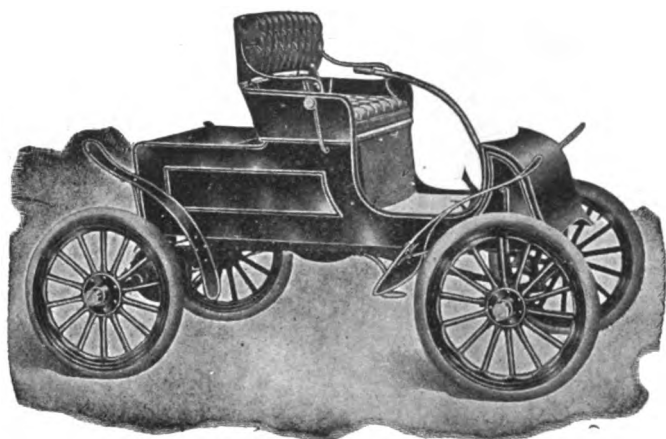
The company, however, failed to make very decided impress on the trade or public, and the inevitable has resulted.

### New Officers for Electric Vehicle Co.

At a meeting of the directors of the Electric Vehicle Co., held last week, the resignation of Arthur W. Newton, secretary and treasurer, who has been connected with the company for the last year, was accepted. The vacancies were filled by the election of W. G. Henderson, of Philadelphia, as treasurer, and H. W. Kyte, who has been for a number of years on the clerical staff of the company, as secretary.

### French Firm's Head Coming.

Felix Fournier, of Felix Fournier & Knopf, Paris, France, is due in this country in August, on his annual visit, with the intention of purchasing automobiles and automobile accessories. This firm has an extensive business in France, Belgium and Switzerland.



If you have \$ to exchange for enjoyment you can get more of the latter for fewer of the former in the

# Northern

than in any automobile built.

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423 So. Clinton St

**BUFFALO,**  
28 W. Genesee St.

**DETROIT,**  
254 Jefferson St.

**SAN FRANCISCO,**  
114 Second St.





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NEW YORK, JULY 2, 1903.

### Its Importance to the Industry.

The result of the great International race is of grave trade import. Should the Frenchmen win it will give a still further fillip to the automobile industry of that country. Should the English win, it will be of vast service to English car makers. Should the Americans win, it will give a greater stimulus to the American automobile trade than it possibly could do either the French or the English trade, for both of these countries have already scored, while with the Americans it would be the virgin victory, so to speak. It appears, offhand, that the Frenchmen may be said to be fiendishly bent on fetching the cup back to France. Their cars are all right; this has been proved many times over and over in the great Continental contests and speed trials. The men themselves are full of the dare-devil spirit, and they will ride to win or kill. The chief drawback to the Frenchmen is that they are habituated to practically straightaway

courses, and they are rather taken aback at the sinuosity, the sharp turns and the narrowness of parts of the Irish course, as compared to their own smooth, broad, wonderful roadways.

The Englishmen have every chance for a look-in. For twenty-five years past England has bred a race of sportsmen particularly adapted to this sort of work. She started with the heroes of the old high bicycle and the space eating scorchers of the Great North Road. She early became accustomed to hearing of wonderful feats of bicycle and tricycle riding, both on road and track. Later many of these men graduated into motor-cycling and into automobiling. The courage developed in the latest forms of cycle racing will stand them in good stead in this automobile struggle. The Englishmen have thoroughly familiarized themselves with the course, and will not hesitate to get all they can out of themselves and their machines. No sudden turn, no sharp corner will frighten a scintilla of energy or courage out of them; rather will it charge them with increased energy, with the demoniac quality. The Englishmen who will compete for this cup are not easily feazed, and in their case, courage enthroned on goods cars, will play by far the larger part.

Of the Americans we can say but little. Ours has not been a country of great automobile contests, and the frightful struggle which will be put up in the International Cup Race will be a somewhat strenuous experience to Winton, Owen and Mooers. Besides that, their cars have yet to be measured alongside of the French and foreign types. That they are serviceable we very well know, but whether they can stand the awful strain of a four hundred mile tortuous journey, driven at their utmost limit, is a question upon which this event will throw considerable light. A great factor in the case of the Americans is the ability with which the Yankee takes to a new game. The history of international contests between Americans and foreigners is that the Americans have been victorious eight times out of ten, no matter what form the competition happened to take. On the water, on the cinder path, and even when we have competed on the race course—in the Derby and in the Grand Prix, for instance, victory has often crowned our efforts. And it may be the same in this case. Of the sons of men, none is more quick-eyed than the American, and the quality of action, action, action, without weighing consequences, may carry one or more Americans to the fore. That all of us

sincerely hope this may be the case is putting it in the mildest fashion. In fact, every good American automobilist has his eye fixed on Dublin or thereabouts, and he is hoping for a result that will warm the inmost cockles of his heart.

### One Little Reform.

A hundred years from now there will be no trolleys on city streets, no railway "crossings," and there may even be separate paths for motor cars through town and country. All this will make for a lower death rate. In those days the editorial alarmist will deal largely with aerial collision. Meanwhile we who live to-day must strive and ever try to accomplish some little reform from time to time, to make continually some little steps toward the ideal.

And here is one little reform suggested to the thoughtful and influential automobilist, the man who runs his club or who knows a State Senator. We found, on a long automobile tour through three populous States, that there was little danger of anything running into us, for we were too spry. The other things that used the roads had neither our speed nor our control, so it would be, indeed, only through stupidity or lack of skill on our part that any of these things could possibly run into us.

There remained, however, the danger of our running into them. In broad daylight this danger was at the minimum. At night, however, it was altogether different. On this long tour we found that not a few of our heartquakes came from an all too sudden discovery that something or other was on the dark road directly in front of us. As we drew near to these problematical and mysterious somethings the headlights of the car, penetrating the darkness, would gradually discover and uncover some buggy or farm wagon or one of the many vehicles of use or pleasure.

These usually were crawling along the road, most often at a snail's pace, and always sheathed in deadly darkness. 'Tis true that occasionally they displayed—no, not displayed, anything but that—but rather carried a lamp, and it was generally as dim as an imbecile's intellect. In nearly all cases great pains seemed to have been taken to hide the lamp from sight. No house-breaker could have been more careful of his bullseye. And now for our little reform. We advocate the revival of those laws which compel all vehicles to carry lamps at night. In States where there are no such laws we advocate that such be enacted. We further

maintain that such lights shall be placed on the inside—that is, at the left of a vehicle—or at the tail end, or both. To us it seems that such laws are absolutely necessary, less for the protection of the automobilist than for the safety of the occupants of countless vehicles that crawl along America's dark roads on the darkest nights.

### A Matter of Credits.

A recent failure in the trade, which we of course regret, throws considerable light on the credit question. This firm got into some careful firms rather heavily, solely because it had "good backing." In other words, the enterprise had been launched and financed by men of means and repute. It is the firms situated just as this one was which give the credit department much thought and which occasionally fetch it a severe cropper.

This firm in question had two very important factors which minimized its "strong backing." First, the men whose names opened up for it avenues of credit were merely investors, not direct managers. Their money was "in," but their hands were not at the wheel. Second, the firm was operating on obviously wrong lines, was flying, strange as it may seem, in the face of all the traditions of the automobile market, and, worse than that, it carried the incubus of a too fertile inventor. A concern of ample capital might, in time, admit the error in market policy, turn tail and achieve success in another direction. But what concern could possibly carry an inventor with a new idea every morning and still live?

In the weighing of credits in a new business such as this the most important fact in the count is, What is the firm at? Is it on the right lines? Is it making something marketable, or is it face front to a stone wall? Such are the determining factors, and such questions, as applied to a firm's policy, should be very easily answered by the creditor who is constantly selling them and who necessarily must be well posted on the automobile trade.

As for the "backing" of a firm, the credit man must attach little weight to "the men behind the scenes." When an enterprise is merely "backed" it is more or less of a speculation. Certain men have simply put some spare cash into it. To these the enterprise is neither bread and butter nor life or death. If all goes well, it is all right, but if things go wrong, why "the backer" gets out from under as quickly and as mysteriously as may be.

As a wag once said in this connection: "Oh, yes. They have big money back of them. But it's so far back they can't get at it."

### The Ubiquitous Canine.

Automobilists who do much touring have noted the slow but certain education on the subject of automobiles which is obtaining among our friends the dogs, those yelping and leaping hyenas of the crossroads. From the tourists' standpoint, there are only three types of canines, and the classification is based on behavior, and not upon pedigree: Class No. 1 is composed of the dog who regards the flying car with silent disdain. This class is a compound of laziness and cowardice, in equal parts. These are the curs of the race.

Class 2 embraces those brutes who madly rush in from dooryard or farmgate, seem bent on eating up the machine and picking the bones of its occupants. Class 3, a small body as yet, but growing rapidly, is the educated dog, the fellow who has gotten partly under the carwheels or who has felt the lash of the whip so often that his curiosity as to automobile construction has completely evaporated. This division of dogdom has been taught to beware the flying car, and, instead of raising a perfect inferno at the rear wheels, the dog who has been scotched, lashed or clipped now stands well off the road and gives the automobile a wide berth, and this education is being rapidly carried forward, for nowadays no touring car is complete without one or more long lashed whips, and part of the education of the up-to-date chauffeur is to flip a canine at twenty paces and send him home howling.

### How to Increase Horse Values.

To produce a valuable horse has long been the study of many men in the Blue Grass region and elsewhere. Since the birth of automobilism, however, that problem has been vastly simplified. In our day 'tis scarcely necessary to study food and climate and pedigree. All one has to do is to get a horse—any old kind of horse. Having got the horse, guide him with premeditation and care up against an automobile and get him hit. Instantly his value will increase several hundred percent. This has never been known to fail. Many a poor old hack, within snuffing distance of the button yard, has had one last lingering laugh in his boots at hearing himself described by his irate owner—owner suing for damages—as a blooded animal, worth at least seven hundred dollars.

### Another Sort of Justice.

Justices out on Long Island, where the word of one constable is generally considered to be better than the word of three or four eminent citizens in an automobile case, will please take notice of the decision made in the Court of Special Sessions in New York on Wednesday, when J. B. McDonald was discharged after simply offsetting the policeman's testimony with his own.

The policeman said that he was a judge of pace and knew that McDonald was going eighteen miles an hour. McDonald said that he was a judge of pace and knew that he was not going faster than eight miles an hour. The full board of Special Sessions judges were on the bench at the time, and McDonald was discharged.

Just a ray of hope, just a glimmer of the sunshine of justice and good sense is breaking through the black clouds of prejudice and persecution that have been hanging over automobilism.

A policeman has been found who had read the Bailey law, and was trying to act intelligently and fairly the other day, and three justices on a New York bench have taken the word of a citizen accused of excessive speeding as an offset to the word of a policeman.

Such shafts of light rifting the gloom help one to believe that it will not be long before the rabid persecutors of the most modern vehicle begin to see the folly of their ways and grow ashamed of the role of fanatics trying to check the progress of the race.

The practice of supplying different sized sprocket wheels—usually rear sprockets—is a growing one, and nothing better illustrates the approach of the refining stage than this. Differing uses, no less than different roads, call for varying gears; and the changes of sprocket wheels make it possible to obtain them without any particular trouble. Level, rolling and hilly roads afford occasion for three different gears, and to send out cars all geared alike, or to have no means of making changes, is a proceeding that cannot be long tolerated.

Does anyone recall a case of a horseman arrested for driving at an illegal rate of speed? And if not, why not? No one supposes it is because they do not violate the existing ordinances. But, except where motorists are concerned, these ordinances are made to be violated. The only difference is that no one is punished. With automobilists—but that is another story.

## JENATZY WINS THE CUP FOR GERMANS.

(Continued from page 511.)

showing was very poor, and before the race was half over it had become a struggle between France and Germany.

The race was run in sunshine and showers, but without serious accidents. There was a big crowd on hand. The press arrangements were execrable.

It was a great race, the greatest ever run for the cup, and all the factors of endurance and manipulation of turns considered it probably was the greatest as a test ever run on any occasion. The map shows you the course, looking like an irregular figure 8. Imagine the lines of that 8 a good stone road running for the most part between hedges and woodland, through a peaceful pasture and farming lands, and tracing here and there its way through a village. It is in a country noted for horse breeding and hunting that the scene was set. Imagine this pretty country, thickly dotted with tents and temporary stands of every description at the the sides of the serpentine rural road, behind the hedges and on the hillocks, and all with flags flying, and imagine, also, five thousand of the Royal Irish Constabulary, uniformed in dull, dark green, and you have the background of the race. The constables, picketed everywhere, suggested a country newly in possession of an invading force, but the holiday decorations and liveliness of scene that was all about was in striking contradiction to this suggestion.

The stand of R. J. Macredy and J. C. Percy, from which the Motor World representative viewed the race, was at the Moat of Ardscull, three and a half miles from Athy, and just where the cars had to slow up to go around the moat. This was agreed by every one to be the best possible viewpoint, better, even, than that to be had from the grandstand erected by the British club. The cars covering one loop of the "8" four times and the other one three times, had to run over the stretch between Athy and Kilcullen, seven times, that being the intersecting line, and each time they came rushing toward our stand at full speed, only to slow down when it seemed as if about to crash into us.

R. G. B.

Jenatzy's name has long been a familiar one in French automobile annals. He is a Belgian, although representing Germany in this contest, having been selected almost at the last minute by M. Jellinec, of the Daimler Co., to form one of the German team. Last year he was a participant in the Ar-

dennes Circuit race, driving one of his own gasoline cars, and had made excellent time on the first two rounds, when one of the front wheels broke while he was going at full speed on the straight road. The car ran on three wheels for some hundreds of yards, when the car turned over completely, hurting his mechanic somewhat seriously, and cutting Jenatzy himself about the head.

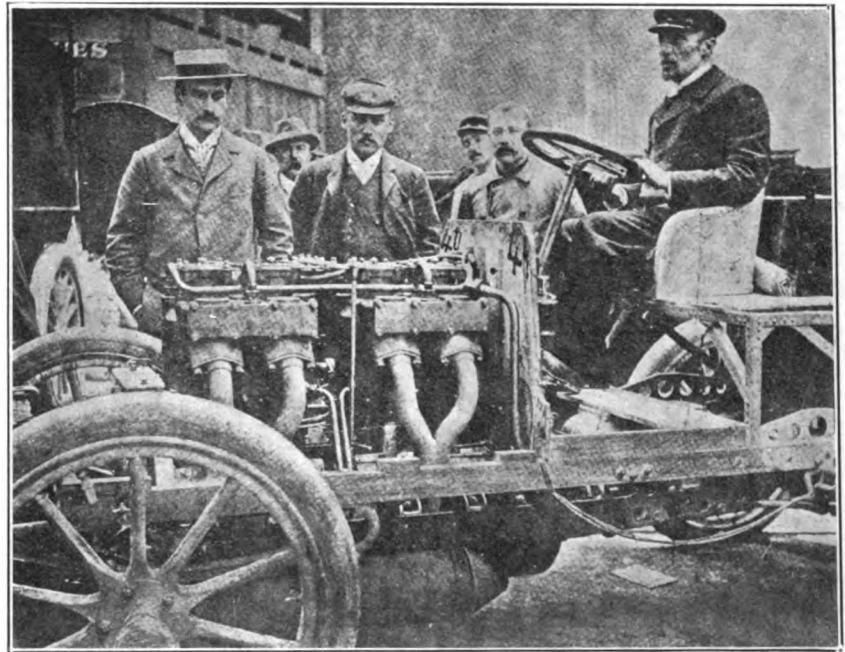
The Mercedes car that Jenatzy drove was built especially for the Paris-Madrid race, the six cars which the Daimler Co. were building for the cup race having been burned in the destructive fire at Cannstadt last month.

Its weight is well within the limit of 1,000 kilograms, being just 990 kilograms. The cylinders are 6 inches by 6 inches. The radiator is half the width of the 60 horsepower car, and the axles are about half the diameter. The engine is the same as the 60

top speed is about three to one, but this is brought down again by the bevelled gear, which makes the speed of the countershaft on the top speed equal to that of the engine.

The first international cup race was run in France in 1900. The course was from Paris to Lyons, 353¾ miles. France had everything her own way, but the event was always considered more or less of a fizzle. Charron, on a Panhard, won in 9 hours 9 minutes, averaging 38.45 miles an hour. The 1901 event, Paris to Bordeaux, May 29; largely a failure as no foreigners competed. Girardot, finished badly, crippled, in 8 hours 50 minutes 59 seconds; distance, 327½ miles; our average, 37 miles. The 1902 event, run in connection with the Paris-Vienna contest, was won by S. T. Edge on an English car, the Napier. He was the only man to finish.

The Frenchmen on the cup race committee



M. JENATZY, THE BELGIAN, WHO WON THE CUP FOR GERMANY.

horsepower in design, but bigger, especially in the cylinders, which are, as said above, 1 inch more in diameter. The Lindsey clutch is the same pattern as on former cars. The gear also is the same as in last year's 40 horsepower, the countershaft being the same size, too, the diameter of which is 1½ inches. The wheel base is 9 feet 9 inches, and the back of the driver's seat is only 3 inches in front of the back axle. The Continental tires are the ones used on this car. They are manipulated very easily, being very thin at the sides, and flexible, but having a thick tread. The control is identical with the system at present in use on the 60 horsepower, but last year's gear has been put in and the same gear case is used. The proportions of the gear are different, for the gear is higher on the top speed, whereas in the case of the 60 horsepower the proportions between the gears are equal.

Thus in the new racing cars this high top speed obviates the use of very large sprockets. The proportion in the gear box on this

had a terrible time finding fault with the Mercedes cars. It was at first objected to that they had Michelin tires not made in Germany, but the Cannstadt people went to the expense of having them made in Germany, although they were Michelin tires in every respect.

The story, as told in the New York Herald of Monday, was:

"One event of the day has been the meeting of the international commission, composed of Mr. Ord, representing Great Britain; Mr. Clarence Gray Dinsmore, the United States; Count Sierstorpff, Germany, and Comte Robert de Vogue, France.

"Their business was to examine the protest put in by the French competitors against the Mercedes, which are using the Michelin tires, which have been made specially for them in Frankfurt. The regulations demand that the competing machines be made entirely in the country they represent in the race, and as Michelin is a French manufacturer, his establishment of work-

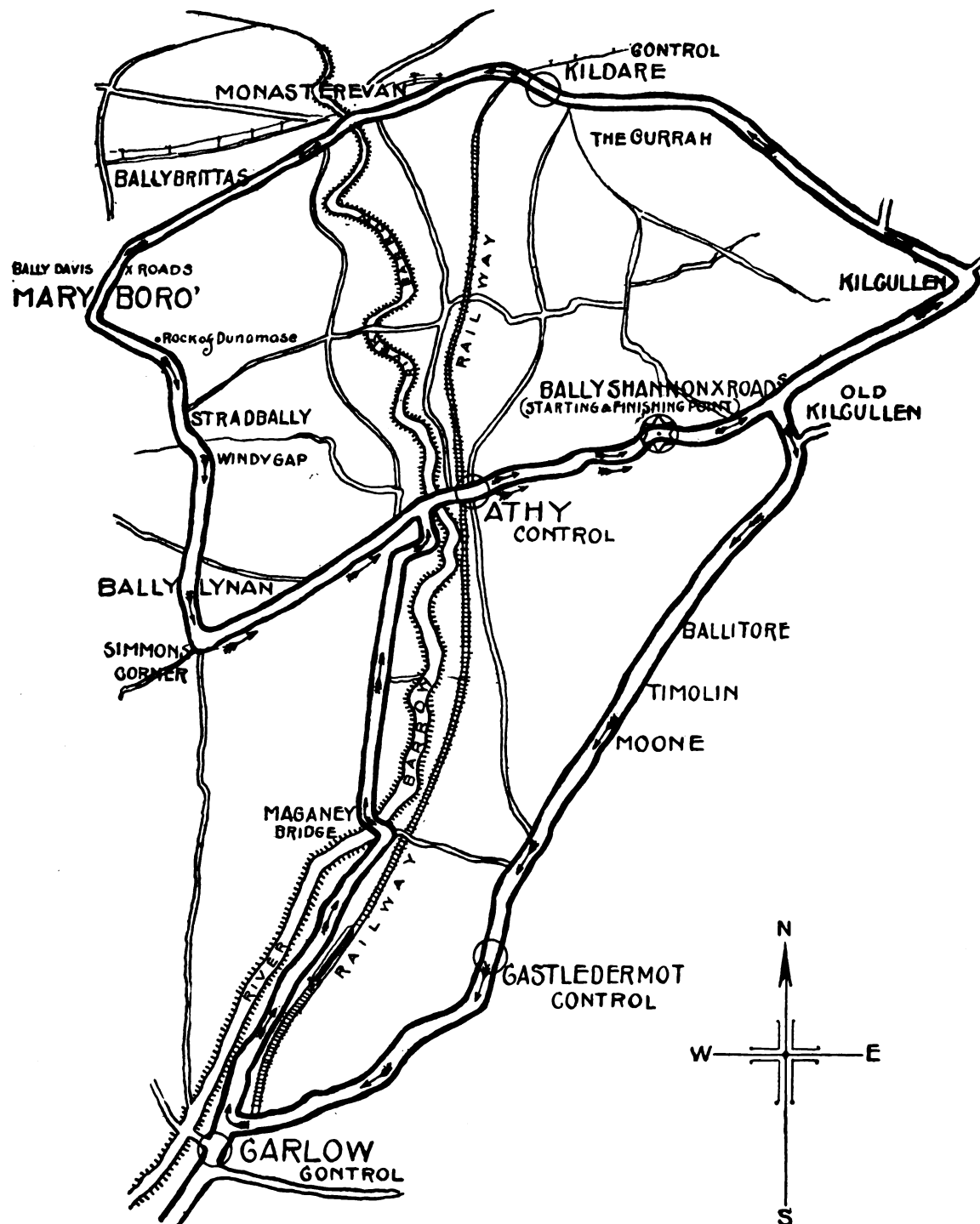
shops in Frankfort to make tires for German machines is held by the French firm to be a violation of the spirit of the regulations.

"Michelin admits that all the tires were made in Frankfort, but of German material

he could not guarantee the air valve to be of German manufacture, the tires on the Mercedes machines were ruled to be unacceptable. Consequently they had to be replaced by tires of bona fide German manufacture—namely, Continental tires.

of the vicarage of Timolin, and this will be headquarters for the Stars and Stripes during the contest.

The French and Germans were surprised at the contrast between this course and the broad, straight highways to which they have



THE NARROW, TORTUOUS COURSE OVER WHICH THE FLYING CARS RACED.

and by German workmen. The question still unanswered is whether the valves are of French make. They will be investigated tomorrow and the decision rendered by the commission."

The committee, after an almost interminable discussion, finally came to a decision on tires. The session was held on Monday. In view of the statement of M. Michelin that

Dublin, June 28.—All the teams have now arrived for the race. The French and Germans got here yesterday. The American and English contingent have been living near the course for a week back, and they have thoroughly familiarized themselves with every hook and crook of it. Characteristically, the Yankees on their arrival at once set up a capital right in one of the streets

been used on the Continent. They pride themselves, however on their great road riding abilities, and, while they execrate them, they do not in the least fear the many turns and corners and the some times narrow stretches of the Irish course.

Some of the critics here regard the Winton machines as particularly useful looking. Others think that Mooers's car is danger-

ously light in places, considering the immense engine. All the French connoisseurs hold that the American cars, while suitable for the track, are too light for this great road test.

The headquarters of the Americans is in a very retired spot. About half a mile from the village of Timolin they have leased an old tumble down house attached to the vicarage, and from a flagstaff on the hillside float the Stars and Stripes. The party consists of Mr. Winton, Mr. Owen, C. B. Shanks, of Cleveland, and two machinists. Besides the racing machines are two touring cars, in which the party intend to tour England and France after the races.

Dublin, June 29.—The racecourse country of Old Ireland has been invaded to-day by five thousand of the Royal Irish Constabulary. Clad in their sombre green, they are here, there and everywhere. But this time 'tis on a mission of peace they come, with a bit of sport thrown in. And the five thousand will, indeed, have their hands full until after the great race has been run.

Both the French and German teams went over the course to-day, and pronounced it a good "sporting course." Round the westward circuit the cars will pass four times; over the southern circuit three times, and over the common base seven times, thus making up 368 miles, 765 yards.

The controls are at the entrance and departure of the few villages that are on the course. At these places the cars will slow down between certain marked points, and the time used in passing between the controlled points will be noted and deducted from the record of each car.

To-day was marked with warm breezes and light showers. The American and English teams tested the route, flying hither and thither and familiarizing themselves with the ticklish points, the turns and certain rather sharp corners. The Germans and Frenchmen seemed never to get enough of this preliminary work, and they have been out all day.

If there be a majority opinion among the sharps, it rather favors the Frenchmen, whom they rate as decidedly dangerous. Particularly do they fancy Gabriel (Mors). The experts hold that the Frenchmen are masters of difficult road work, while they insist that in this branch of automobiling the Americans, though skilful, must be counted as novices. But these experts have not given full measure to the American daredevil spirit, which, in the heat of battle, acts, and only figures out results when it is over. These Americans, by the way, are the only men who have ridden the course in the reverse direction. When asked the reason they replied that this reverse ride gave them a much better idea of the angles of the road.

The precautions that have been taken for protecting the route are believed to be ample. The chief fear is that cattle, frightened by the succession of rattling dust streaks, may get on the road and cause accidents.

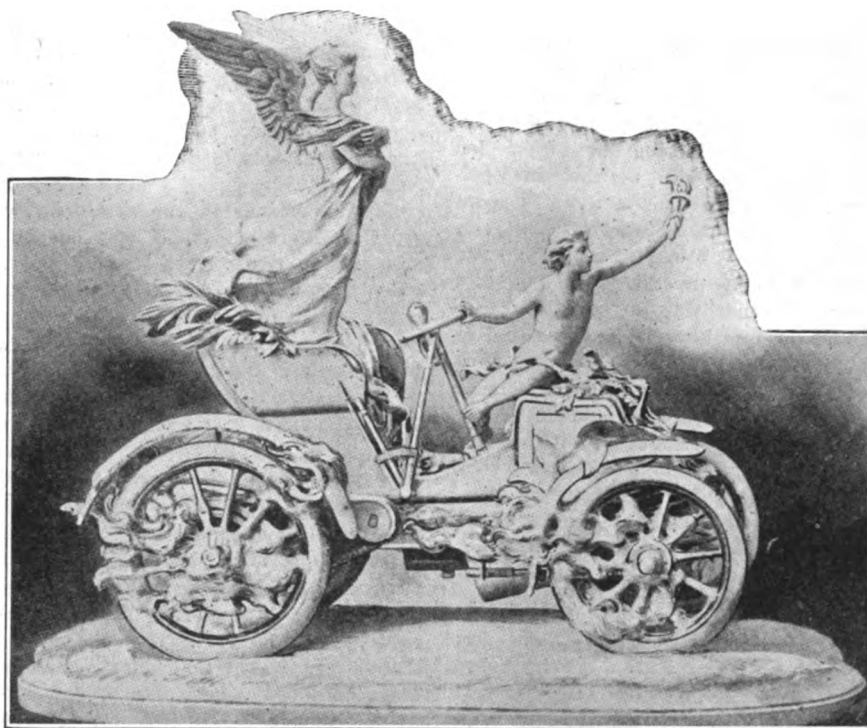
Earl Dudley, the Lord Lieutenant of Ire-

land, will entertain a large party on Thursday and Friday. He will also give a garden party on Saturday in honor of the English and foreign motorists.

So great is the enthusiasm over the automobile in Ireland that a crowd immediately assembles around a stationary machine. The small boy writes his name or puts a distinguishing number on the mud guards or back panels. To prevent this, Macdonald, Mr. Edge's chauffeur, earthed the high tension current the other day, greatly to the surprise and confusion of mischievous boys who touched any part of the machine. Bulley, Mr. Edge's favorite terrier, sitting on the machine, was also able to communicate electric shocks to those who stroked him. The funny part was that the dog did not seem to feel the shocks that he was dealing right

yesterday, but are stopping out at Malahide, near the course. Dr. and Mrs. J. G. Lyman came over from London in a Panhard, stopping at Kingstown. Mr. and Mrs. C. J. Glidden, of Boston, who are going to try to get near the North Pole in an automobile, have arrived here in their machine.

Among other Americans in Dublin just now are F. W. McCutcheon, Miss McCutcheon, Miss Ferguson, J. R. Goodwin, C. P. Young, A. Banks, J. S. James, J. Byrne, Mr. and Mrs. F. H. Lovell, Dr. A. J. Arnold, Mr. and Mrs. R. P. Worrall, Mr. and Mrs. Daniel Daly, Hughes Fawcett, E. A. Hackett, Thomas H. Craig, Walker Patton, Miss Patton, Mrs. E. M. Gardner, the Rev. Charles F. Reid, Richard K. Fox, Mr. and Mrs. L. V. Harkness, Mr. and Mrs. A. K. Macomber and Miss Nellie Gourley, all of New York.



THE GORDON BENNETT CHALLENGE CUP.

and left. The racing Napier is now locally known as "the devil's car."

Quite a large number of Americans are quartered in Dublin, though many preferred getting rooms nearer the course and some at towns near Dublin. C. Gray Dinsmore and Howard Johnston, the former representing the Automobile Club of America and the latter his alternate on the international commission, have taken a house in Fitzwilliam Square, where they are entertaining Baron Henri Rothschild and some other friends. Mr. and Mrs. Anthony J. Drexel to-day were lunching at the Shelbourne Hotel. They had with them Lady Alwyne Compton and Mr. Van Voorhees. They all came up on Mr. Drexel's 45-horsepower Mercedes from Kingstown. The party is going to-morrow to stop with Colonel Crichton, who has a place near the course.

Mr. and Mrs. Trafford Huteson, of New York, who left London about ten days ago in an automobile for Scotland, arrived here

#### Banker Bros.' Bulletin Board.

Great business enterprise in connection with the race was shown by the Peerless Motor Car Co. and Banker Bros. W. J. Morgan, who accompanied L. P. Mooers and his Peerless car to Ireland, was a strenuous press agent, and for a week before the race his friends in this country were receiving postal cards from him almost daily, the cards having on them a big halftone of Mooers and his car and a few words of information such as this, dated June 24, from Ballitore: "All well, but raining hard. Taking gymnasium exercise." The exercise probably referred to Mooers.

At the Banker Bros.' store, at 147 West Thirty-eighth street, New York, Manager C. G. Wridgway had a bulletin board put up on Wednesday, and from early Thursday morning there was a big crowd on hand reading the bulletins that were received by cable almost hourly from "Senator" Morgan.



## THAT EXPLICIT BAILEY LAW

### Is Causing All Sorts of Trouble to New York Dealers—Test Cases Coming.

One of the snares and delusions of that erudite piece of legislation, the Bailey law, which was warranted to be sound and kind, and, above all, wonderfully clear and explicit, has been brought into strong relief in New York City during the past week. The police began acting under instructions last Thursday to arrest all automobilists caught on the highways without a license tag. Then began a chase like that of the dogdays, when the catchers go forth with their nets after the unfortunate mongrels who are not tagged.

In the general dragnet it was natural that some dealers should be caught, and so they were. Then came the appeal to the clause of the Bailey law that exempts manufacturers and dealers from taking out licenses for any cars except those kept for their own private use. This appeal was of avail in some cases, but not in others, for, of course, a magistrate soon was found who had his own ideas of what the law meant. It was quickly seen, however, that this phase of the law was one that would have to be submitted to some high court for interpretation, because of its being fraught with trouble for dealers through being arrested and made to go to court and prove their identity, if nothing more. This interpretation will be sought by C. T. Terry, counsel for the National Association of Automobile Manufacturers. The point has been brought out very plainly that the Bailey law is not explicit, but is one calculated to keep the lawyers busy.

#### GEORGE B. ADAMS, FIRST VICTIM.

The fun began on Thursday, when George B. Adams, of the Pope Motor Car Co., was showing a new four cylinder Toledo to a party of three. One policeman who halted him to inquire why he had no license allowed him to pass on into Central Park, on learning that he was a dealer. A second policeman halted him in the park and would not accept the explanation. Mr. Adams was taken before Magistrate Flammer. Mr. Adams telephoned for Counsellor Niles, of the A. C. A., but he was not needed, for as soon as he heard Mr. Adams's story Justice Flammer looked up the law. In Section 166 of the Bailey law, which requires the registration of automobiles by owners, he found this sentence, and after reading it promptly dismissed the complaint:

"This section shall not apply to a person manufacturing or dealing in automobiles, except those for his own private use and except those hired out."

The case of Mr. Adams was, however, only the beginning of things. One of E. J. Willis's men, J. W. White, came next. He also was released by Judge Flammer.

It was White's luck to have two experiences with the police last Friday, which he de-

scribed to a representative of the Motor World. Of the first he said:

#### THE TEN DAYS POINT.

"It was early in the forenoon, and I was out with a car sold the day before to a customer uptown, whose man was with me to familiarize himself with its workings. During our ride a bicycle policeman halted me and inquired for the number of the car. 'It has no number yet,' I told him; 'it was sold only yesterday, and there hasn't been time for a return from the application for a license.' 'Where are your initials, then?' he asked, and I replied that the law requiring initials was done away with by the new law. 'I don't know about that,' said he. 'Well, that's how it stands,' I replied. Then he began about the number again, and when I told him that the purchaser of a car has ten days in which to secure his number he exclaimed: 'Do you mean to say that you have a right to run around killing people for ten days without either number or initials?' But he let it go at that, and we drove on. The policeman may have been Debes, for all that I know, for it was in his district that this occurred.

"My experience in the afternoon was of quite a different sort. I was out on a demonstration trip with a possible purchaser, when a mounted policeman halted us in the park. On being informed that the car belonged to a dealer, he wanted to know if I was a dealer. When I answered in the negative he asked if I had a chauffeur's license, and he got me on that. Perhaps he would have let me go even then, however, but there was a roundsman there and something had to be done. Magistrate Flammer discharged me a little later.

#### POLICEMAN, JUDGE AND JURY.

"Most of the trouble," Mr. White continued, "arises from the fact that nobody seems to understand just what the law stands for. Every policeman seems to have his own ideas concerning it, and the only way I can see out of it is for somebody to put up a good, strong test case. A roundsman at the station house said to me that it looked to him as if the dealers were contriving to get their men arrested in order to have a test case made. There is one sure thing about it, and that is that these arrests under the Bailey law are hurting the business. People who would like to own automobiles are deterred from purchasing them by fear of unintentionally breaking or appearing to break some regulation and suffering arrest, together with what they regard as unpleasant notoriety. That condition will prevail just so long as any policeman is allowed to constitute himself both judge and jury, and determine for himself what the law means and whether its provisions are being violated, regardless of anything which may be shown by the unfortunate occupants of the automobile which he chooses to hold up. But the police are cooling off a little, in view of the results of recent arrests."

E. J. Willis, White's employer, said in regard to the various interpretations put upon the law:

"As matters stand, nobody can tell just where we are. I sent to Albany my application for a certificate, and it came back to me, together with the money I had sent for the fee; on my application was indorsed a statement to the effect that as a dealer I am not required to take out a certificate. This exemption appears to be a disadvantage, rather than an advantage to the dealer, who is apt to be held up by a policeman at any time. He is certain of a discharge, of course, but, nevertheless, he has to suffer the annoyance and the loss of time caused by the arrest. It strikes me that some provision should be made which would enable dealers to avoid this, and perhaps the best way would be to have a special certificate, which would serve to satisfy the policeman, who otherwise is at liberty to doubt any assertion made to him by the person whom he arrests. As for me, I have decided to get a certificate for myself anyhow."

#### MAC WILLIAMS' CASE.

On Friday a new phase came. James W. MacWilliam, a chauffeur employed by the F. A. La Roche Co., was arrested in Central Park while in charge of one of the company's Darracq machines, carrying no license tag. He was taken before Magistrate Pool and paroled for two hours to procure bonds. Later, when he appeared again, he was accompanied by his brother, George M. MacWilliam, treasurer of the company, who was prepared to furnish cash bail; also to present to Magistrate Pool reasons why the prisoner should be discharged. These reasons included the very pertinent one that the Bailey law exempts the vehicles of dealers from the requirement as to carrying a license tag. The magistrate did not consider the plea sufficiently cogent, but held MacWilliam for special sessions. Immediately after his arrest MacWilliam was interviewed by a representative of the Motor World, to whom he said:

"The occasion of my being in the park was that the purchaser of one of our automobiles had sent to us for instruction the man who was to operate it. We went out in one of the company's demonstrating cars with that purpose in view, and I had no idea that there was any violation of law involved, knowing that the Bailey law exempts makers and dealers from the requirement as to license tags. As for myself, I carry an operator's certificate, which I thought was sufficient. We passed the policeman who arrested me and he made no attempt to stop us, but when we returned over the same road there was a roundsman with him, and the arrest occurred at that time.

#### JUDGE POOL'S IDEA.

"On my first appearance in court before Magistrate Pool I explained the situation to him as it was, and stated my understanding of the law, which was that no license tag is required on vehicles owned by makers or dealers. In the course of the hearing the magistrate expressed the view that the law gives to makers and dealers only the right to have unmarked motor vehicles in their possession, but not the right to operate them

upon the public streets and parkways. It was under that conception of the meaning of the law that he held me for special sessions."

Treasurer George M. MacWilliam, speaking of Magistrate Pool's attitude in the matter, said: "While Magistrate Pool was quite emphatic in holding that the Bailey law does not permit even makers or dealers to operate unmarked motor vehicles, he was as emphatically indisposed to venture upon any interpretation of the law as it affects that class of persons in their rights and privileges on the road. He said practically that the matter could be left to the higher court. In one way we are just as well satisfied with the situation as it exists, although it has cost us time and trouble. There are such important issues involved in an authoritative interpretation of the law that it is just as well to have a case upon which they can be brought out.

#### LAW PUZZLES ALL.

"So far as the law itself is concerned," Mr. MacWilliam continued, "it has been created, and there is no getting away from it. There are many, of course, who see necessity for some such law, but there are very few of them who can explain the provisions of this one intelligently. When even the lawyers are unable to agree as to the interpretation and effect of some of its provisions, it is small wonder that laymen wonder where the law places them. We don't like the law, looked at in its best possible interpretation, but we are not disposed to violate it if we know how to avoid it. That is about all there is to our side of the matter. There should be some way provided for the marking of the vehicles we take out which would guard us against the annoyance and loss of time to which we are subjected and to which we are liable every time we come within the view of a policeman."

The MacWilliam case was one of several that came up in the Special Sessions Court on Wednesday, and among the lawyers present were Charles Thaddeus Terry, counsel for the National Association of Automobile Manufacturers, and N. W. Niles, counsel for the Automobile Club of America. While awaiting the judges Mr. Terry conversed with a representative of the Motor World and expressed his opposition to the Bailey law very plainly.

#### TERRY CALLS IT CLUMSY.

"It is a clumsy piece of law making," he said, "and it is not too severe to speak of it as unintelligent. One of the things back of of it is the vindictiveness of a lot of horsemen, who would like to monopolize the roads of Long Island for speeding their horses. As counsel for the National Association of Automobile Manufacturers, my special opposition to it is based upon the business injury it inflicts through misinterpretation of the clause which exempts makers and dealers from the provision requiring license numbers to be plainly displayed upon motor vehicles. It is only a fair presumption that the intent of this exemption is to give to makers and dealers the privilege of

operating, by themselves or by competent and licensed representatives, such cars as they have to exhibit to possible purchasers for trial and sale, or such as they operate for purposes of demonstration. Otherwise the exemption is of no trade benefit whatever, while the clause in the law as interpreted by the police and some of the magistrates is causing a great deal of unnecessary trouble. The business interest affected is too large already to be thus hampered, and it is a necessity that there should be some definite understanding of the law which will enable those who have automobiles for sale to conduct their business without having to appear in court every now and then."

#### CASES IN COURT.

In the case of George L. Brown, a chauffeur, for whom Mr. Terry appeared, he entered a demurrer. The complaint charged the defendant with driving a motor vehicle without the "proper" number. Brown is employed by Smith & Mabley, and the motor he was driving was one owned by that firm, and was being used in a demonstration. The fact that it was a dealer's vehicle was not stated in the complaint, and the result was that the demurrer was allowed and the case dismissed.

Subsequently the court came to the conclusion that all the similar cases on the calendar were in the same category, all of the complaints being defective. When the MacWilliam case was called Counsellor John J. Cunneen asked to have the case set back a number in order that Mr. Niles might be present to try it.

"Oh, enter a demurrer," Judge Mayer suggested, but Mr. Cunneen was unwilling to take that course prior to the arrival of Mr. Niles. Eventually, after a private consultation between Messrs. Niles and Cunneen and Judge Mayer, it was decided to enter a demurrer, with the understanding that the court would make its consideration equivalent to a test case. Judge Mayer will write a decision, which, it is expected, will clear up the muddle somewhat.

#### TEST YET TO BE MADE.

Thus far the trouble has been that no complaint has yet been presented in court upon which could be raised such determining issues as would call forth a judicial opinion covering the ground which it is desired to cover. Charles Thaddeus Terry, counsel for the National Association of Manufacturers, would gladly have tried the case in which he demurred on Wednesday, but it was in such shape through the defectiveness of the complaint that there was nothing with which to go to trial.

"The fact is," Mr. Terry remarked to the representative of the Motor World, "it will be necessary to make an adequate case upon which a decisive trial can be had. I shall draw up a complaint myself in such form that upon it we can go to trial with issues involved which will evoke such a decision as will clear away the present befogged condition of the situation under the law."

Mr. Terry intimated that his course might be to sue the Police Commissioner and an officer for false arrest.

#### Citizen's Word as Good as Cop's.

It was made evident in the Court of Special Sessions, in New York, on Wednesday, that in the opinion of some jurists the word of a private citizen is as good as that of a policeman, an opinion which does not appear to hold in some courts nowadays, especially if the private citizen is an automobilist. James B. McDonald, a chauffeur, was charged with exceeding the speed limit, and the bicycle policeman who appeared against him testified that he was driving his automobile at a speed of about eighteen miles an hour. In reply to questions by Joseph T. Darling, who appeared in McDonald's defence, the policeman was emphatic as to the speed, giving his testimony as a matter of knowledge, although he admitted that he did not time the car. McDonald, testifying in his own defence, said that the speed at which he was going when he was arrested did not exceed eight miles, according to his judgment, which, he said, was based on extended experience. The giving of testimony occupied but a few minutes, and Counsellor Darling stated the case very briefly, the point of his argument being that no offence had been proved, the question of speed being simply a matter of the differing judgment of two men. The court was equally brief in its deliberation and decided in favor of the defendant.

"While it was an instance of one man's word against that of another," Counsellor Darling said to a representative of the Motor World, "the policeman discredited himself by too great alacrity in stating the speed so positively as a matter of knowledge. His testimony would have been stronger if he had made the statement as a matter of opinion. That offset any prejudice against the defendant's testimony which might arise from the consideration that his judgment of his own speed might naturally be affected by his desire for self-justification."

#### Cord Meyer Decision Reversed.

County Judge Seabury, in the Mineola, Long Island, court on June 26, reversed the decision in the case of Cord Meyer, who was convicted on November 16 of having violated the automobile speed law. The charge was that Mr. Meyer had driven his machine one-eighth of a mile in sixteen seconds, and he was fined \$30. An appeal was taken on the ground that the prosecution had failed to prove that the road on which Mr. Meyer was riding was a public highway. The judge held that it was not, and the sentence was reversed.

#### 'Bus Line for Sioux Falls.

Sioux Falls, S. D., where the divorce mills are located, is to have a new automobile coach line. A corporation has been formed to operate a line between Sioux Falls and some of the surrounding towns. The coaches will be of two styles, one, a twelve passenger brake coach, an open air vehicle with a canopy top; the other, a closed, steam heated, electrically lighted vehicle, can be run in all kinds of weather.

## MASSACHUSETTS BILL A LAW

### Passes Legislature and Receives Governor's Signature—An Unsatisfactory Measure.

The Massachusetts Legislature, having at last passed the much discussed automobile bill, Governor Bates signed it on Saturday last. The law applies to all motor vehicles, and that means all vehicles propelled by other than muscular power, except railroad and railway cars, motor vehicles running only upon rails or tracks and steam road rollers. The law is rather complicated, and needs close study to understand. It permits the cities and towns to make special regulations as to the speed of automobiles and motorcycles, and the use of such machines upon particular roads or ways, including the right to exclude them altogether therefrom.

All automobiles and motorcycles must under the new law be registered by the owner or person in control thereof, and after September 1 no automobile or motorcycle shall be operated upon the highway unless registered with the Massachusetts Highway Commission and displaying its registration number in Arabic numerals not less than four inches long, in such manner as the commission may determine. It is expected that the commission will order these numbers displayed on the front and rear of the machine, instead of on both sides and in the rear, as provided in one of the many drafts.

The law does not, however, prevent the operator of automobiles by unlicensed persons if riding with or accompanied by a licensed chauffeur or operator. Vehicles owned by non-residents of the State and driven by persons residing and registered in other States may be operated in this State under the speed laws without special registration.

### City Loses on Appeal.

Another point was scored last week by A. C. Banker, the Chicagoan who is putting up such a plucky fight against the city's licensing ordinance. Judge Healy overruled the demurrer of the city of Chicago to the bill filed by Banker asking that the city be restrained from causing the arrest of persons who have not complied with the city ordinance and taken out an automobile license. The point raised by the city was whether Banker could sustain his bill when he said that he sued in his own name and person and in behalf of 1,500 other persons. The overruling of the demurrer leaves the rule enjoining the city still in force.

Previous to appealing the case City Electrician Elliott sent notices to each automobile owner to prepare to comply with the new numbering ordinance before July 1. Beginning then the police will be instructed to strictly enforce the law and arrest all violators.

## Pittsburgers' Boulevard Race Meet.

Pittsburg automobilists, most of them, are all agog over the series of speed contests to be held over a specially selected mile of the Beechwood Boulevard on July 11. W. Linford Smith, secretary of the Pittsburg Athletic Club, who has charge of the details, has put up the following programme:

A, motor cycles; B, electric cars; C, steam cars weighing less than 1,200 pounds; D, steam cars weighing over 1,200 pounds; E, gasoline cars weighing less than 1,000 pounds; F, gasoline cars weighing between 1,000 and 1,500 pounds; G, gasoline cars weighing between 1,500 and 2,000 pounds; H, gasoline cars weighing over 2,000 pounds; I, free-for-all, open to all cars, except motor cycles, whether owned by members of the club or not.

Director E. M. Bigelow, of the Department of Public Works, has lent his co-operation to the members of the club, and will aid them in making the races a success. About a mile and a half of the speedway will be roped off, so that flying starts can be made and the director will see that the roadbed is in the pink of condition. The automatic timing device will be used for the first time in Pittsburg. Mr. Smith, in speaking of the precautions against accident yesterday, said jokingly: "We're going to keep people from getting killed if we have to kill them to do it."

### Missouri Motorists to Meet.

A "big meet" of automobilists, cyclists and motor cyclists will be held July 4 at Belleville, Mo., under the auspices of the Southern Automobile and Cycle Club. The St. Louis automobilists and cycle dealers have taken great interest in the affair, and all of the agents received entries. There are eight events on the programme.

### Beat Kilometer Record?

According to a cable from London, dated June 26, D. M. Weigall is credited with a flying start kilometer in 28 seconds, a rate of 98.9 miles an hour. No other details are given. If authentic, this eclipses the Augeres time of 29 1-5.

### Two Races for Elyria.

Elyria, Ohio, automobilists will celebrate the Fourth with two races, a ten-mile, open to all, and a one-mile, best two in three heats, open to the 1,200 pound class. D. S. Troxel is managing the details.

### For Horse Show Week.

Commencing on July 4, a feature of the opening exercises of "horse show" week at Minneapolis, which is to be inaugurated on July 4, will be a five-mile automobile "derby."

### Omaha Plans Race Meet.

Louis Flescher, of Omaha, Neb., is working up a series of automobile races to be held during July.

## SCARRITT NEXT PRESIDENT

### Prominent Members of A. C. A. Declare That he Will Succeed Shattuck

What about a new leader for the New York Automobile Club "of America"? The question was raised a few days ago in a coterie of automobilists, and immediately the busybodies fell to "slate making." It was generally agreed that "Shattuck's day is over," and that some one else is needed in the office of president. The question was, who was the man for the place. Several names were mentioned, including those of J. A. Hill, William C. Whitney and Dave H. Morris, but the majority of sentiment seemed to favor the present first vice-president, Winthrop E. Scarritt.

A Motor World man took it up where the coterie left it off, and from two men who stand high in the councils of the club he received the assurance that Mr. Scarritt is the coming man. They spoke confidently, as if the matter was all cut and dried and the result of the election a foregone conclusion. One said:

"Mr. Scarritt will surely be nominated, and if he will accept, will be elected. He has declined before, but I think he will be prevailed upon to accept this time."

Said the other man:

"Scarritt is the man. He is the next president, beyond all question."

### Finds Prohibition is Illegal.

Director McIlvain of the Department of Public Works of Allegheny has decided not to issue an order prohibiting automobiles from entering Riverview Park. It has been ascertained, since he made the announcement, that an automobile is a vehicle, within the meaning of the State act, and that the director has not the power to prohibit them. The most he can do is to issue instructions regarding their speed, and this he intends to do.

### Want Damages for Injuries.

William Durfee, C. C. Moore and Joseph Baker, all of Providence, R. I., claim that they were injured by being thrown from Mr. Durfee's automobile by striking an unguarded ditch on Bedford street. The ditch was dug by drain layers, and, it is alleged, was not properly roped off and lighted. The accident occurred some weeks ago, but they have just brought suit against the city for \$3,000 damages.

### Omaha Motorists Get More Speed.

Through the efforts of H. E. Frederickson and J. J. Dwight, who protested, the Omaha authorities have changed the speed ordinance from five miles an hour to seven miles an hour in certain parts of the city, and to twelve miles beyond the more populous districts. The five mile limit was amusing; the new schedule is better.

## SHATTUCK'S NEW GARAGE

**Providence is Benefitted by Progressiveness of Premier New England Concern.**

New England automobilists and others from more distant points who make the run to Providence, R. I., have a cause for congratulation in the completely equipped station now being established in Dorrance street, that city, by H. B. Shattuck & Son, of Boston and Newport.

This store will be one of the largest in the country and fitted up with every facility for the sale, storage and repair of cars of all kinds.

This latest move on the part of H. B. Shattuck & Son emphasizes their determination to retain their place as New England's premier distributors. Their Boston business has grown to such an extent that an entire four story brick building on Stanhope street, in the rear of their present store, has been leased, and is now being entirely remodeled for them. This will be occupied as a sales-room and storage station for the large cars handled by them, which include the Searchmont, Autocar and others. Their present store will be retained exclusively for the sales of the famous Oldsmobiles, for which they are New England distributors.

### The Rain Proof Peerless.

Prevailing weather conditions seem to have no effect on either the sales of Peerless cars or the enthusiasm of their new owners.

Just as the Motor World man stepped into the Boston branch last week, he found Manager A. E. Morrison at the door, watching a new Peerless car going off in the rain.

"Just delivered that car to Captain Mathewson, of Providence, R. I.," he explained, "and he's taking it home over the road."

An initial trip over a road rain soaked for nearly a month speaks well for the confidence Peerless purchasers have in both the car and their ability to operate it.

Incidentally, it shows how Manager Morrison is imparting some of his own enthusiasm among New Englanders with whom the Peerless has made a decided hit.

### A Good Firm to Deal With.

That merit tells is shown by the steadily increasing orders the Standard Welding Co., Cleveland, Ohio, is obtaining for its steel automobile rims. These rims are accurately made, true to gauge and free from blemish, and, being electrically welded, a perfect joint is assured. The high standard of their welded seamless tubing also assures a steady demand for it, the company's processes producing a quality of tube that works well and runs regular in size. The Standard Co. is in a position to accord good treatment to their customers, and to make prompt shipment of goods.

### Railroad's Harvest Time.

The automobile industry is proving a good thing for a number of railroads. Most of the factories ship cars in carload lots, an ordinary freight car having a capacity of from three to seven cars, the number depending on the size. The Olds shipments this year will probably exceed 1,000 carloads. Of the heavier cars, the Winton people lead in this respect, and there are a number of concerns that will ship more than 100 carloads. Even in the small towns the dealers sell enough cars to make it pay handsomely to have them shipped in carload lots.

## GENERAL DELIVERY WAGON

**Pushing Cleveland Concern is Selling Gasolene Business Vehicles—An Example.**

Realizing to the full the importance of the commercial automobile, the General Automobile and Manufacturing Co., Cleveland, Ohio, are turning their attention in its direction. A vehicle built for Barie Bros., the dry-goods people of Saginaw, Mich., shown in the accompanying illustration, gives a good idea of the appearance and businesslike air of this type. It is constructed on the same gen-



A SAGINAW DRY GOODS FIRM'S "GENERAL" WAGON.

### Did Well at Denver.

The General Automobile and Manufacturing Co. have been advised by their Denver, Col., agents of the good showing made by a General car in the recent 100-mile endurance run. It was awarded a first class certificate, having lost but 4 out of a possible 425 points; this was due to a broken battery connection.

### An Addition for Metzger.

The contract has been let for the construction of four additional stories to the building on the corner of Jefferson avenue and Brush street, Detroit, Mich., occupied by William E. Metzger as an automobile store. This will be of masonry and heavy mill construction, the exterior of paving brick.

### Want a Stock Bonus.

If the citizens of Blackwell, Okla., will take a certain amount of stock of the Streator Automobile Co. the factory of that concern will be located at Blackwell. A representative of the concern visited Blackwell last week with that purpose in view.

### Watertown Claims the Lead.

Watertown, S. D., aspires to the position of the premier automobile town of the State. In one day recently five Rambler cars were delivered to purchasers.

eral lines as the concern's runabout. The power is supplied by a two cylinder balanced type engine, using gasolene supplied by an adjustable diaphragm carburetor, which automatically feeds the proper amount of fuel after once being set, regardless of all changes of speed. The transmission is of the sun and planet type, and the control is secured by frictional brake bands, which are operated by single lever for forward changes and by foot lever for reverse. The length of the wagon over all is 9 feet 8 inches; width over all, 5 feet 9 inches; wheel base, 6 feet 6 inches; tread, 4 feet 3 inches. The inside dimensions are 4 feet 3 inches long. The wagon is intended to carry 3,000 pounds. 3 feet  $\frac{1}{4}$  inch wide and 3 feet 5 inches high.

### Skinner's Pleasant Task.

Kenneth A. Skinner, United States agent for the De Dion-Bouton motors and cars, was chiefly occupied last week in accompanying Miss Alice Roosevelt in her drives about the Hub in a De Dion car. The President's daughter is a skilful operator, does her own driving and has become an enthusiastic devotee of the pleasures of automobiling.

### Rochester Concern Out.

The Rochester Carriage Motor Co., Rochester, N. Y., have given up their automobile business.



C. J. Weldon, Rockford, Ill., is about to begin the manufacture of electric vehicles. He expects to retail them at from \$100 to \$1,000.

The National Elevator Works, of Honesdale, Pa., have a designer and inventor at work on the plans for a new automobile. When the machine is ready for manufacture the company purposes to increase its capital stock from \$50,000 to \$100,000.

J. C. Brandes, representing the Cudell Motor Co., has arranged with Angler & Whitney, of Boston, Mass., to represent them in the New England States. The firm have opened temporary showrooms at No. 43 Columbia avenue.

The Canadian General Electric Co., Ltd., Toronto, P. Q., Canada, now represent the Electric Storage Battery Co. in the sale of the chloride accumulator and the oxide accumulator throughout Canada. All inquiries from Canada in regard to storage batteries should be addressed to the above concern.

The Motor Car Co., Newark, N. J., has sold a Peerless motor car to the Muralo Co., of that city. This concern manufactures wall covering, and has bought the car for the use of one of its agents, who will travel about from place to place in his automobile, instead of using railroads and trolley cars.

A neat folder issued by the Joseph Dixon Crucible Co., Jersey City, contains paint specifications for steel and iron construction and maintenance work, with samples of some of their best colors. It is illustrated with views of noteworthy structures in various parts of the country upon which their paints have been used.

Representatives from sixteen firms met last week at the rooms of the Automobile Club of Chicago and formed the Chicago Automobile Trade Association. H. W. Jones, of the Electric Vehicle Co., was elected president; J. A. Linville, Chicago Motor Vehicle Co., vice-president; Fred Pardee, of Pardee & Co., secretary, and Ralph Temple, treasurer.

The newly incorporated De Loura Auto Mfg. Co., Fort Dodge, Ia., met last week and perfected its organization. Directors and officers were elected as follows: President, J. H. Abel; vice-president, L. E. Armstrong; secretary and treasurer, F. C. Minogue; general manager, H. E. De Loura. Directors—J. H. Abel, F. C. Minogue, John Gleason, F. V. Sherman, H. E. De Loura and Samuel Emms.

Officers have been elected by the directors of the Ford Motor Co., Detroit, Mich., as follows: President, John S. Gray; vice-president and general manager, Henry Ford; secretary and business manager, James J. Couzens; treasurer, Alex Y. Malcomson. The directors are the officers of the company and J. F. Dodge and John W. Anderson.

The capital of the company is \$250,000, of which \$100,000 is paid.

To say that the Waltham Mfg. Co. are rushed is to put it very mildly. They are almost literally swamped with orders for the Orient Buckboard, and, although they are turning out these fetching little cars at the rate of one every two hours, the output is too small; consequently the company is increasing its facilities so as to turn out one car every hour.

So pleased are the stockholders of the Alden Sampson Co., of Pittsfield, Mass., with the Moyea cars which they built for the Moyea Automobile Co. that they contemplate reorganizing and enlarging the concern and entering upon the manufacture of motor cars exclusively. For this purpose a stock company, with \$250,000 capital, is to be formed. A number of local men stand ready to take stock, and the matter will be thoroughly gone over at a meeting to be held shortly.

The unique appearance of a little pamphlet entitled "From Sheffield to London in a White Steam Touring Car," issued by the White Sewing Machine Co., is itself attractive as an advertisement, while the contents are interesting for all who enjoy descriptions of travel. A well written account of the trip has been cut, although it appears to have been torn, from the pages of the newspaper wherein it appeared, and is reproduced in the form of a dainty little scrapbook.

The Automobile Club of Springfield, Mass., will have a special division to itself in the Fourth of July parade, and many of the members will turn out in handsomely decorated cars. The committee in charge of the parade have received two handsome silver cups, which will be awarded to the two best decorated cars. At a recent meeting of the club Harry G. Fisk resigned the presidency, because of the pressure of his business affairs, and V. C. Medcraft was elected to succeed him.

As an album showing various types of automobiles, the elegant little portfolio issued by the American Ball Bearing Company, Cleveland, Ohio, to show the character of the makers and the machines supplied by the company with the bearings it manufactures, is a handsome production. The cover bears a very appropriate and beautiful design in gold, and covers showing the earliest and present United States flags, the former the famous Betsy Ross flag, with the eagle and shield resting upon the two staffs where they cross.

The "General Illustrated Catalogue No. 8 of Automobile Material, Parts and Supplies," sent out by the A. L. Dyke Automobile Supply Company (Incorporated), of St. Louis, Mo., is a pamphlet of 184 pages, quarto, bound in red paper covers, which bear their full share of the great amount of text and illustration. It is a wonderful revelation of the extent to which the automobile industry has grown. Everything known to automobiles and automobilists is there illustrated or described.

The H. J. Koehler Sporting Goods Co., Newark, N. J., is about to enlarge its garage and salesroom by adding thereto about thirty feet from the store in front and removing the repairing department to the cellar. This change will be made as soon as it can be done, and will result in more roomy quarters for automobiles and better facilities for the repair men. An elevator will be put in so that automobiles needing the attention of the machinists can be lowered from the garage to the repair shop below ground.

A picture which tells a story forms an artistic hanger which the Badger Brass Mfg. Co., of Kenosha, Wis., is sending out as an advertisement of the Solar Lamps which "Show the way." An automobile in the foreground is speeding along a country road plainly revealed by its own lights and that of another car coming from the distance. There is also a bicycle rider in the foreground whose path, well lighted by his own lamp, has lost interest for the moment as he turns to see the car passing him. It is a spirited composition.

Although this is the first season for the gasoline car of the Locomobile Co. of America, the concern, owing to its fine facilities, has been able to make early deliveries. A number of its 16 horsepower cars have already gone into the hands of purchasers, and at the present time the concern is in splendid shape to make further deliveries. While the engine in this model is rated and advertised as 16 horsepower, yet on the testing stand the motors have been developing from 24 to 26 brake horsepower in almost every instance. No engine leaves the hands of the tester until it has developed over 22 brake horsepower.

The Motor World has been notified that the article appearing last week under the title "Touring Requisites" originally appeared, in substantially identical form, as a copyrighted article in the Horseless Age of April 15. The publisher of that journal, therefore, wishes acknowledgment given for its publication without credit. This is gladly given; and it may be added that the article came in a roundabout way from abroad. The policy of the Motor World is to borrow judiciously and to credit to the limit. As for this paper, it is not copyrighted. Its contents may be copied all over the country, and the privilege thus offered is to the manifest advantage of the trade and public.



## DEBES SUED FOR DAMAGES

**Lawyer Parker Turns on Bicycle Policeman who Delights in Arresting Motorists.**

Bicycle Policeman Debes, the good looking young officer who has been making himself very busy with the automobilists of New York City, caught a Tartar on Thursday night last week when he arrested Orrel A. Parker on a charge of overspeeding his automobile in Fifth avenue. Mr. Parker, who is a member of the law firm of Le Barbier & Parker, was discharged by Magistrate Deuel in the Jefferson Market Court when the case came up there Saturday morning. In the evening of the same day a process server met Debes when he reported to the station house for duty and handed him a City Court summons in the case of Parker against Debes. The suit is for false arrest, with a claim for damages amounting to \$2,000.

The circumstances of the arrest were these: About 10 o'clock Thursday night Mr. Parker was travelling up Fifth avenue in his automobile, which is a touring car accommodating six persons. He had as companions three friends and fellow alumni of Princeton, all of whom are New York lawyers. They were Richard M. Farries, Robert Inch and A. Parker Nevin. The arrest was made on the up grade between Thirty-fifth and Thirty-sixth streets. Parker was detained at the station house until bailed by his friend Farries.

"I was not speeding at all," Mr. Parker said to a representative of the Motor World who called at his office to get his version of the affair. "My automobile is not built for scorching, and I drive it always at a pace which in my judgment is within the limit imposed by the law. Nor am I opposed to speed limitation. The safety of the public is the end aimed at, and I, with the majority of automobilists, have as much regard for that as anybody. My pace on this occasion did not exceed that of the general traffic on the avenue while I was on the level stretch just before reaching Thirty-fifth street. Here I put on a little more power to maintain the same speed on the up grade, and it was probably the increased labor of the car which suggested to Debes that my speed had increased.

"Debes rode up beside my car and said to me, 'You are under arrest.' I inquired, 'What for?' 'For exceeding the speed limit,' he replied. 'But I am not travelling faster than eight miles an hour.' I told him. He would listen to no argument, however. In fact, he was somewhat arrogant from the outset. There was no heat in our discussion of the matter, for I kept cool about it, and proceeded to the station house, as he directed. Unthinkingly I passed the street he had told me to turn into, and he was after me in a minute, reminding me that I was under arrest.

"Now, in regard to my suit, although the

aim is to secure a judgment for money damages, the object is not to get money, but to teach a lesson which the policemen need to learn. They should have it impressed upon them that they cannot arrest automobilists indiscriminately. Debes claims to have timed me, but in that I believe he tells an untruth. As a matter of fact, it would be difficult to time an automobile on a single block, and it would be an injustice to hold a man, even were he thus timed, for a momentary spurt incidental to developing the additional power necessary in taking an up grade. This Debes, I am told, has been on the force only a little more than two months, and in that time he has made twenty-two arrests. He is one of those fellows who are ambitious for reputation, and I have heard that he has made his boast of 'waking up automobilists with a jolt.' I don't know that any of his prisoners have been punished. I had no difficulty in clearing myself of his charge against me, and now it is his turn. I could have him arrested at once and compel him to give bail, but it will be time enough when my case is gained. Should judgment be given in my favor he will certainly have to pay the money or be liable to arrest and imprisonment until it is paid. And I shall not be disposed to let up on him."

Mr. Parker's suit is in the hands of his partner, Charles E. Le Barbier, who was formerly an Assistant District Attorney. As the reporter was about to take his leave Mr. Le Barbier entered and laid a document on Mr. Parker's desk. The latter glanced at it and handed it to the reporter with a laugh. It was a notice from George L. Rives, Corporation Counsel, of his intended appearance for Debes in the trial of the case.

### Will Discuss the Matter.

Milwaukee has taken back water on the bell vs. horn ordinance. Recently the Solons who run Milwaukee decided that every automobile must be fitted with a bell, and that the tooting of a horn would not answer as a warning to pedestrians and others. Whereupon many owners of automobiles called upon the City Attorney of Milwaukee and requested a hearing. A date has been fixed, and pending the final decision in the matter the police will not make any arrests under the new law.

### Nutmeg State's Big Registration.

The official records in Connecticut show that already five hundred licenses have been taken out by car owners, and it is estimated that when every automobilist in the State has complied with the law the total registration will reach one thousand. The new registration law went into effect on July 1.

### Bidding for License Numbers.

Some of Cleveland's motorists are anxious to corral certain numbers for their machines, as 666, 711, 999, 1,000 and 1313. Mrs. May Post, secretary of the Ohio Motor Co., captured 666, and, for a second machine, she recently bought 777.

## MONTREAL RUN FORMALLY OFF

**Governors of A.C.A. Vote Against Contest and do Nothing About Tour.**

As was foreshadowed in the Motor World last week, the governors of the Automobile Club of America have formally decided to abandon the plan of holding a reliability contest to Montreal in the fall, and the contest committee was instructed to discontinue its preparations.

This was done at a meeting of the board of governors held on Monday. The reason assigned was that a letter had been received from the National Association of Automobile Manufacturers, stating that they would hold a reliability contest in the fall, and the governors decided that it would not be good policy to ask the makers to support two runs.

With regard to making the proposed run to Montreal a tour, no action was taken, but Acting President W. E. Scarritt said this subject would be taken up later.

Chairman J. A. Hill of the contest committee, when seen, said:

"So far as the contest committee is concerned, everything is off now. We have no contest to arrange, and if any tour is wanted later, that will go to the tours and runs committee. The manufacturers wanted to take hold and have a run, so we will let them have it. They were looking for trouble, now they have got it. The whole opposition seems to have been inspired by the feeling against President Shattuck, though I don't see why the whole club should be made a mark because of him. As for myself, I'm off for Europe on July 10, and I'm glad to get rid of the bother."

### First of Many Suits.

The first of a series of suits against the city which will aggregate \$100,000, all because of the wrecking of Frederick C. Havemeyer's automobile on the Hoffman Boulevard, near Long Island City, on November 4 last, came to trial in the Supreme Court last week, when Mr. Havemeyer sought to recover \$7,000 as the value of his smashed machine.

Charles Hunt, a contractor, is joined with the city as defendant, it being alleged by Mr. Havemeyer that as he and a party of friends were returning from the Meadow Brook races at Cedarhurst, Long Island, they ran into a sewer excavation on the boulevard which was nine feet deep. Every person on the machine was injured, the chauffeur so seriously that his leg had to be amputated. The trial will be continued.

### Offered \$1,000,000 Bail.

Banker Spencer Trask has made a record. When his chauffeur was arrested on June 25 he went on his bail bond for \$1,000,000. Of course, the bail was not fixed in that sum, but Banker Trask wanted to clinch the matter. 'Twas a case of speed limit.

The following cablegram was received from Ireland, June 29th:

**“L. P. Mooers drove  
Peerless over course  
yesterday, beating  
best cup time.”**

This is evidence as to the qualifications of the PEERLESS to uphold America's honor at all times.

The PEERLESS Car which competed in the International Race for the Gordon Bennett Cup is constructed along the lines of PEERLESS Touring Cars, which indicates superiority, as our regular 16 h. p. cars have repeatedly defeated specially prepared 20 and 25 h. p. American and foreign touring cars in speed, hill climbing and endurance contests. Not only their speed, but the fact that PEERLESS Cars are at all times under the operator's control and can be easily guided, gives them a decided advantage over others.

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**THE PEERLESS MOTOR CAR CO., Cleveland, Ohio.**

AGENCIES IN THE PRINCIPAL CITIES.

## ST. LOUIS' MOTOR CHAIRS

**Two Thousand of them to be Used for Transporting Exposition Visitors.**

Two thousand electric automobile chairs will be used at the forthcoming St. Louis Exposition, in place of the man pushed perambulators that have been such an important feature of similar exhibitions in the past. A concession is about to be granted to the Electric Chair Co., of St. Louis, and is the outcome of many practical tests before the management of the fair.

The chair has been tried on the residential grounds of President Francis. Running at three miles an hour, its sensitive guard rail,

They may move at will along the avenues, threading their way among the crowds. The discretion of the operator will be exercised to maintain a reasonable speed, which at no time may exceed three miles an hour.

### To Rival the Trolley Cars.

Erie, Pa., June 22.—A company has been formed here with a capital of \$50,000 to operate an automobile motor car service to various portions of the city, as well as to operate an automobile livery. It is understood that the stock has been practically all subscribed and a temporary organization formed pending the procuring of a charter from the State. The intention, as set forth by the promoters, is to cover the various parts of the city not reached by trolley and to establish an automobile bus service. This

## AN UNUSUAL COMPLAINT

**The Fall River Autos go too Slow, and Thus Arouse the Authorities' Ire.**

Fall River, Mass., has its automobile trouble, too, but a most peculiar one. Its grievance is that the self-propelled vehicles either go too slowly or do not go at all.

"The trouble with the average local motor car is not that it runs like mad through the streets, but that it doesn't run at all, and as a result the thoroughfares are blockaded," says a Fall River paper. "During the greater part of the day machines are drawn up on all of the corners of the principal highways, and each machine attracts a crowd



"I DON'T THINK THE TROUBLE'S THERE."



"THERE'S THE PESKY THING."

the invention of Semple S. Scott, has collided with the World's Fair president and stopped "dead." At the end of a ten days' test it is understood that the privilege to instal the chairs at the Exposition will be awarded to the promoters.

The chairs will be rented to visitors to the Exposition for 50 cents an hour. Each chair will carry two passengers, one of whom may operate the machine, or, if desired, an operator will be furnished by the concessionaire. The operator will serve as a guide to all the points of interest. He is posted on a detachable seat at the rear of the chair. In this event the controller and the steering bar are removed from the front and attached to sockets at the rear. Two visitors occupy the front seat.

"There is a sensitive guard rail surrounding the entire machine," says the inventor. "The slightest pressure on any part of this guard will cause the machine to stop within three inches, thus avoiding an accident either by striking a child or coming into contact with a solid object."

It is understood that the chairs will not be restricted to a runway about the grounds.

will go out certain streets, make a circuit and return, forming a kind of belt line. A similar service will be maintained in South Erie. Another feature of the company's service will be an automobile livery, which will be at the call of the public for carrying passengers, will meet trains and do a general business. The automobile motor cars used in the belt line service will be capable of holding from ten to twelve persons.

### Linking Buffalo and Detroit.

Buffalo automobilists are glad; so are those of Detroit. The operators of the steamship line running between those two great cities have decided to carry automobiles from Buffalo to Detroit and return—or reverse—for \$5. The new rate, which freight experts say is remarkably low, will, no doubt, encourage many Detroit automobilists to visit Buffalo, Niagara Falls and so on, while the Buffalo men will feel called upon to visit Detroit. Thus, by the kindness of Traffic Manager Schanz, Woodward avenue and Delaware avenue may be quite neighborly.

of from 200 to 300 persons, who assist the owners in leaning over and looking under the things for some defect that isn't there and which could not be remedied if it were. Many of the carts have a stop motion which brings them to a full pause, but no stop motion which puts them out of their misery; and as they throb and perspire as freely as if they were under way, the effect upon the nerves is trying in the extreme. Accordingly there is talk of enforcing a law which will make it a misdemeanor to experiment with the contrivances before sunset, unless an inspector's certificate can be shown."

### Rebuilt Roads for Auto.

How automobiles make for improved roads was shown at Buffalo, Wyo., recently. An automobile stage is plying regularly between Sheridan and Buffalo, after two years of effort to get the road into condition so that a self-propelled machine could operate over it. The automobile was first tried on the road in 1901, and proved a flat failure, being unable to climb the heavy grades when loaded. The machine has since been remodelled and the road rebuilt. The stage will carry twelve passengers and baggage.

## BELMONT BEATS TIME TRAP

Acquitted of Charge of Speeding Made by L. I. Protective Association.

August Belmont has scored against the farmers of the Long Island Protective Association, who are afflicted with the staked road, tin can and waving handkerchief habit and carry those wonderful watches which record always sixteen seconds as the exact time in which any automobile passes over any measured stretch of road, no matter what the length of the stretch. The time-trap men picked up Mr. Belmont to help along their incomes, but he proved to be a fighter, and secured an acquittal, one of the few recorded dismissals of a case against an automobile on Long Island.

Since the exposure of the "sixteen second" stop watches by the Motor World a new batch of timepieces seems to have been handed around to the farmers by the progressive, liberty loving, vote catching members of Congress and other politicians who are fighting the automobile as their Long Island forebears fought against the railroad, the potato bug and the threshing machine. The time in the Belmont case was not the old familiar sixteen seconds, but 17¼ seconds—note the quarter—for an eighth of a mile. The testimony in the case was interesting.

Mr. Belmont was riding in his motor car on May 14 when three men appeared before him in the middle of the road and bade him stop. They explained that they were officers of the Long Island Highway Protective Association. They told him that they had just timed him coming down the Jericho Road. Mr. Belmont indignantly denied that he was going faster than twenty miles an hour.

James W. Curran, one of the witnesses, told about driving stakes on either side of the road at a given point and then, with the assistance of John Garvin and Sidney Bloxom, other officers, measured off 660 feet, or one-eighth of a mile. Curran said they threw in an additional five feet in order to give good measure.

Just the day before the expiration of the Cox speed law and the coming into existence of the new Bailey Speed law, Mr. Belmont's machine was heard running along in the distance. Curran took a position in a field in sight of the starting point while Garvin held the watch at the finish, and Bloxom was stationed further down the road to head off the machine in case he received the signal.

As the rear wheels of the machine passed the stakes Curran dropped his handkerchief and Garvin started his stopwatch, and as the automobile crossed the finish he gave the signal to Bloxom to hold up the machine and arrest the occupants. Curran said he was paid \$50 a month by the Highway Association for his services. John Garvin, who was technically known to the auto chasers as the "middleman," testified that the machine

made the distance in 17¼ seconds. He came to grief under cross-examination at the hands of W. W. Gillen, who represented the defence. Garvin's sworn complaint stated that the speed at which the automobile was going was equivalent to 25¼ miles an hour. When Mr. Gillen called his attention to the fact that an eighth of a mile in 17¼ seconds was equivalent to something over 26 miles an hour, the witness asserted that he didn't swear to the number of miles an hour, but only to the eighth of a mile he timed.

Bartels testified that the machine was of seven horsepower only, weighed slightly less than a ton, and that its guaranteed speed was seventeen miles an hour. He had repeatedly tried to get a greater speed out of the machine, but was unable to do so. On the day of his arrest he was running at second speed, owing to a broken spring. Sigfried Long, an experienced chauffeur, testified that on May 29 last, following the arrest of Bartels, he ran the machine over a surveyed course at its fullest capacity in order to test the speed, and Thomas B. Seamon, a civil engineer, of Hempstead, who surveyed the trial course, testified that he timed the machine on the trial and it covered the distance in 25¼ seconds, which was equivalent to 17.4-100 miles an hour. This terminated the testimony, and the jury, after they were out an hour, came in with a verdict of not guilty.

The jury was of the opinion that the distance, one-eighth of a mile, was too short to get a fair idea of the speed at which a machine was running.

### Speed Fixed at Detroit.

An automobile ordinance was reported last week by the Detroit (Mich.) Council. It contains provisions restricting the speed of automobiles to six miles an hour when turning corners, and limiting them within the three-quarter mile circle to eight miles, with a speed of twelve outside. A nominal license fee will be imposed, and all machines required to be registered at Police Headquarters, every change of ownership being reported to the license collector. The license number must be placed in a prominent position, and all machines carry a light after dark.

### Coachmakers Read the Signs.

Wise men in their generation, the managers of the English Coachmakers' Co. are offering prizes for drawings of motor cars. Says one of these gentlemen:

"It is the four-in-hand, the mail phaeton, the private omnibus and all cee and under-spring carriages that the motor has ruined. The motor car has caused carriages to come on to the second hand market before their time. There is neither the team nor tandem driving that used to be; regimental drags are no longer kept; while officers now drive motors instead of smart phaetons."

Urbana, Ohio, automobilists are talking up an informal race meet for July 4.

## LONG ISLAND'S DEATH TRAP

August Belmont's Chauffeur has a Narrow Escape at Westbury Crossing.

Once more the danger of the unguarded grade crossing at the Long Island Railroad at Whaleneck avenue, at Westbury, has made itself apparent in a startling manner. It is a constant menace to everybody who has occasion to travel on the public highway, and the railroad company is simply fortunate in the fact that the accidents to vehicles which have happened there have not been destructive of life. O. H. P. Belmont's French chauffeur had a hair raising experience there last Friday evening, which recalls the yet more exciting experience of Henri Fournier and several companions at the same point less than two years ago.

The chauffeur was running toward Westbury, where he was to meet Mr. Belmont at the railway station, and he reached the tracks just as the eastbound express train came tearing along at a speed of fifty miles an hour. There are no gates at the crossing, and the view is obstructed on the south side of the track, so that it is impossible to see a train going east until one is almost on the rails. This was the case with Mr. Belmont's chauffeur, who says he neither saw nor heard the train until he had his front wheels almost on the rails, at which moment the engine seemed almost on top of him. Perceiving that it was impossible to get across he quickly reversed his machine and had begun to back slowly away. The engine passed without touching him, but the step of the first car following struck the headlight of the machine, carrying it away, but doing no further damage, although the jar of the slight collision destroyed the equilibrium hitherto maintained by the chauffeur. When the engineer of the train, who had thrown back his lever on catching sight of the automobile, had come to a stop and proceeded to the spot where he expected to find a spectacle of disaster, he found only a badly scared man in a very slightly damaged automobile.

The crossing at which this accident occurred is an extremely dangerous one for every class of vehicles. There is neither gate nor flagman. Drivers of automobiles invariably slow up on approaching it, as was done by Mr. Belmont's chauffeur in this instance. It was, as already intimated, the scene of the memorable accident of Wednesday, October 30, 1901, when Henri Fournier and five companions on a 10 horsepower Mors machine were hurled from the track by an engine which they had tried to escape by turning on the track and racing ahead of it. Fournier was unaware of the danger that was upon him, although he knew of its possibility and had approached the tracks with caution. The party in his car saw no warning bell was heard. It was not until the party was upon the rails that they realized the approach of the train, and then the only escape appeared to be to take the track for a race, which expedient failed. Fortunately the most serious outcome was the demolition of the automobile, although more or less painful injuries were sustained by each of the party, which consisted, in addition to Fournier, of A. G. Batchelder, H. B. Fullerton, J. H. Gerrie, H. J. Everall and Arthur Lewis.

### Getting Ready for Work.

Automobile club life in Buffalo had a red letter day on June 17, when the Buffalo Automobile Club was formally succeeded by the Automobile Club of Buffalo, the organization of which was noted in these columns a few weeks ago. The meeting was held at the office of President Hotchkiss. The new constitution and bylaws, which provided for the change of the club's name, as mentioned above, were adopted without a dissenting vote. Secretary Frederick J. Wagner reported a membership of 217. In future all new members will deposit the \$1 State license fee with the club's secretary, who will attend to payment and to registration. It was announced that an agreement had been made to supply club members with the necessary official numbers at \$1 each. The club proposes to start a movement in favor of a durable State card of registration as a substitute for the present certificate. The future policy of the club will be protective rather than social; it will aim to exercise a general oversight over automobiling in Buffalo.

### Automobile Laboratory for School.

An automobile laboratory will be introduced in Case School of Applied Science, at Cleveland, Ohio, this fall, and will be the only one in any technical school in the United States. The automobile industry has become such an important one that the authorities of Case School have decided to

establish a branch for the study of automobile equipment. The students will have the opportunity to learn all about the workings of the auto, especially the motive power. Gasolene, steam and electric automobiles will be studied.

### Accident Revealed Truancy.

A curious sequel to Ambassador Mayer's automobile accident at Montalto, Italy, has just come to light. It appears that one of Mr. Mayer's guests in the automobile was Count Antonio Pietromarchi, one of the noble guards of the Pope, who ought to have been on duty at the Vatican the day the accident occurred. The publication of his name in connection with the accident called attention to the truant, who was punished by eight days' arrest.

### Barred From Leipsic Streets.

From Leipsic, Germany, comes news of some new rules regulating automobiling in that town. In the inner city motor cars are entirely barred from all streets except those upon which car lines are operated. Wonder why they don't abolish the car lines, too, and make a clean sweep of it.

### Pittsburg Tourists in New England.

James Loughlin, of Pittsburg Pa., with P. S. Adamson, of London, England, and Arthur E. Davis, is on an automobile tour from Pittsburg to New Hampshire and Maine. The return will be via Niagara Falls.

### Enriching the Vocabulary.

As befits such an eminent and antique lexicographer, "Samuel Johnson" writes to Punch, denouncing the use of the word "chauffeur," and offering as a substitute these choice selections from his copious vocabulary:

"Roadhog," "dogcrusher," "henflattener," "highway nightmare," "gogglebogy," "yokel-chaser," "babyscarer," "motordemon," "country scenter," "petrolwhiffer," "rattle-snorter," "horsebane," "speedmaniac" and "juggernautman."

The ponderous "Samuel" is qualified for a foremost position in yellow journalism.

### Autos to Take Part.

Chicago is to hold high carnival during the week of September 26 to October 1, to celebrate the 100th year of its birth—it was then Fort Dearborn. The automobilists will have one entire day to themselves, and a committee has been appointed, with A. C. Banier as chairman, to arrange a suitable programme. Park runs and a race meet have already been decided upon.

### Potsdam's Anniversary Parade.

The citizens of Potsdam, N. Y., are ingenious. On the 17th they celebrated the fact that that the age of 100 had been reached, and in the parade, without which no civic celebration would amount to shucks, they led off with the ox cart of Revolutionary days, and ended up with the automobile.



SURREY, 12 HORSE-POWER, \$1800 Front head-light extra..

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*It is the only machine that has won EVERY Endurance Contest held in America and every contest or race ever entered.*

## 17 Records and Awards all earned by Stock Machines.

The machine *you* buy is the kind that makes this **Absolutely Unequaled Record.** Our catalogue gives the records complete. Send for it and ask for the "Little Book," too.

Inquirers are urged to visit our factory where every detail of Haynes-Apperson superiority can be seen and fully understood.

**HAYNES-APPERSON CO., Kokomo, Ind., U.S.A.** *The oldest makers of motor cars in America.* Branch Store, 1420 Michigan Ave., Chicago.

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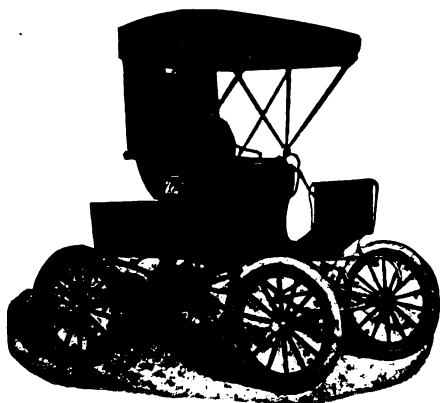
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A swift, smooth run and  
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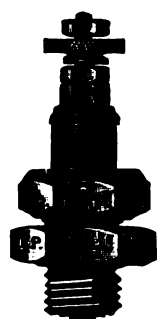
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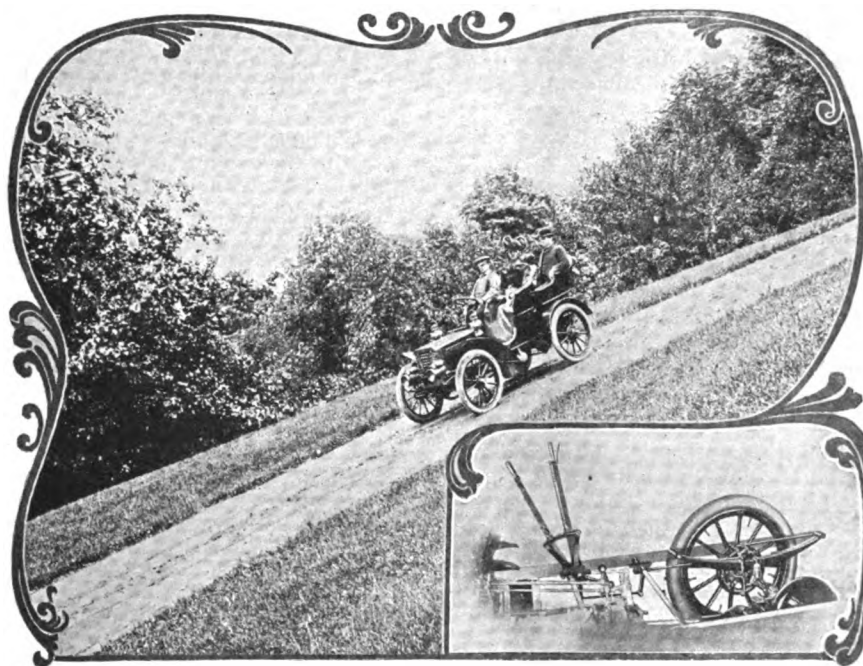


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## The Week's Patents.

731,093. Y Union for Trussed Axles. Walter C. Baker, Cleveland, Ohio. Filed Mar. 7, 1902. Serial No. 97,128. (No model.)

Claim.—1. A Y union made from a single blank of metal and consisting of an axle member and an arch member extending at an angle of approximately forty-five degrees to the axle member, a cup flange made integral with the axle member, and outwardly extending lugs carried by said flange, substantially as described.

731,134. Electrical Igniter for Explosive Engines. Charles E. Sargent, Chicago, Ill., assignor of three-fourths to Oliver S. Lyford, New York, N. Y., and Charles W. Hillard, trustee, Chicago, Ill. Original application filed Apr. 27, 1900. Serial No. 14,553. Divided and this application filed Nov. 3, 1900. Serial No. 35,371. (No model.)

Claim.—In an igniter, a suitably supported rock shaft, a crank arm thereon, a push pin pivoted to the crank arm, a slotted guide for the push pin having a beveled surface, a beveled extension upon the push pin fitted to said surface, an igniter operating disk having a lug adapted to operate said push pin, said lug being inclined upon the side corresponding to the beveled surface and abrupt upon the opposite side and normally rotating toward the inclined side of the lug, whereby the slotted guide permits the push pin to move away from the abrupt side of the lug and the beveled surface raises it off of said lug; substantially as described.

731,170. Petroleum Burner. John Frick, Philadelphia, Pa. Filed Nov. 14, 1902. Serial No. 131,298. (No model.)

Claim.—A petroleum burner, comprising, in combination with the burner head, vaporizer, and mixing tube thereof, a discharge nozzle formed of two telescopic tubular parts, one of which is secured to the vaporizer and provided with a valve opening and seat, and the other being slidable over the first mentioned part and provided with a valve needle, substantially as specified.

731,218. Vaporizer for Internal Combustion Engines. Oscar B. Perkins, Gloucester, Mass. Filed Mar. 11, 1903. Serial No. 147,264 (No model.)

Claim.—1. A vaporizer, comprising, a shell having air and oil supplies and a valve co-acting therewith, two springs, and means for bringing one or both of said springs into action to resist the opening of the valve.

731,265. Cylinder for Oil, Spirit, or Gas Engines. Herbert Austin, Erdington, near Birmingham, England. Filed Apr. 23, 1902. Serial No. 104,412. (No model.)

Claim.—1. In an engine cylinder, the combination with the outer cylinder casting, and the liner rigidly fixed at one end, said liner having near its free end an exteriorly disposed annular shoulder, and the cylinder casting having at its forward end an interiorly disposed annular shoulder, said shoulder having an internal diameter less than the external diameter of the shoulder of the liner, and packing embraced between the opposed faces of said annular shoulders, substantially as set forth.

731,286. Rotary Explosive Engine. Robert Cumming, Edinburgh, Scotland. Filed Feb. 6, 1903. Serial No. 142,119. (No model.)

Claim.—1. A turbine consisting of a stationary frame in which a chamber is formed adapted to receive charges of an explosive substance, said chamber being open at both ends in combination with a body mounted capable of rotation and fitted with series of

blades arranged to pass across the open end of the chamber, the space between the said series of blades in the body mounted capable of rotation being adapted to close the ends of said chamber, with means for delivering charges of an explosive substance to the chamber and for effecting the explosions of charges immediately before and simultaneously with the passage of the blades across the open ends of the chamber.

731,308. Method of Producing Electrodes for Electric Accumulators. Ernst W. Jungner, Stockholm, Sweden. Filed Aug. 5, 1901. Serial No. 71,011. (No model.)

Claim.—1. The method of electrolytically increasing the surface of carriers for active masses of accumulator electrodes that are chemically indifferent to alkaline solutions, which consists in placing a cathode and a plate of a suitable metal, as anode, into a solution of an alkali metal hydrate containing a suitable salt capable of forming a soluble combination with said metal plate, said combination being soluble in the solution with less rapidity than it is formed, and passing an electric current, substantially as described.

731,368. Speed Indicator. Miller R. Hutchison, Norwood, N. J. Filed Sept. 24, 1902. Serial No. 124,650. (No model.)

Claim.—1. A speed indicator, consisting of a gong having conical sides, in combination with a concentrically operated hammer located inside of the gong and operating in a plane at right angles to the axis of the gong and means for adjusting the position of the gong with respect to the hammer in an axial direction.

731,400. Terminal Tip for Electric Wires. Harry L. Worthington, New York, N. Y., assignor of one-half to Valentine E. Kennedy, New York, N. Y. Filed Feb. 27, 1903. Serial No. 145,369. (No model.)

Claim.—1. A metallic terminal tip for electric wires having a pair of wings around which the end of the wire is fitted to be passed and separate means for clamping the wire and its end to the tip.

2. A metallic terminal tip for electric wires having a pair of wings around which the ends of the wire are fitted to be passed and another pair of wings for clamping the wire and its ends to the tip.

731,429. Storage Battery. Carlo Bruno, Rome, Italy, assignor to Luigi Palestine, Rome, Italy. Filed December 4, 1899. Serial No. 739,192. (No model.)

Claim.—The combination with a receptacle of a series of boxes or cases arranged therein, the walls of each box being perforated, active material contained in each box, a conducting plate arranged within the active mass and having points projecting laterally from each face into the active material, sustaining means at the upper edges of the boxes, the terminals on the conducting plates, the supports T, of non-conductive and non-corrosive material, secured to the receptacle and having lugs with which engage the sustaining means on the boxes and the terminals on the conducting plates respectively.

731,430. Alternating Current Regulator. Cummings C. Chesney and William J. Lloyd, Pittsburg, Mass. Filed July 18, 1902. Serial No. 116,013. (No model.)

Claim.—1. In a regulator, in combination, a magnetic circuit, consisting of a fixed and a movable member, windings on both of said members supplied from the same alternating current source, and a closed circuit fixed relatively to one member and in a plane

parallel to the lines of force due to the windings thereon.

731,543. Electrode. James Hargreaves, John W. Stubbs and John Kearsley, Middlewich, England. Filed November 8, 1902. Serial No. 130,519. (No model.)

Claim.—1. An electrode consisting of a metallic conductor bar having openings therein, rods of carbon passing through the openings, castings of lead to make electric contact between the conductor bar and rods, a cement covering for the conductor bar and lead castings, and blocks of carbon connected to the ends of the rods, substantially as set forth.

731,455. Electric Brake. Ernest R. Hill, Wilkesburg, Pa., assignor to Westinghouse Electric & Mfg. Co., a corporation of Pennsylvania. Filed December 29, 1899. Serial No. 741,968. (No model.)

Claim.—1. Means for braking an electrically propelled vehicle comprising two local closed circuits, one of which includes the motor armature or armatures and the brake magnet or magnets, and the other of which includes the motor field magnet or magnets, a source of current and variable external resistance.

731,470. Electrically Controlled Speed Changing Apparatus. Leon J. Le Pontois, New York, N. Y. Filed July 25, 1902. Serial No. 117,041. (No model.)

Claim.—1. In a speed changing apparatus, a shaft driving pinions and a wheel adapted to be magnetized, disks adapted to be laterally shifted riding loosely on said shaft, a magnetic field between said disks, a driven shaft and means controlled by said wheel and said field for transmitting motion from said wheel and said pinions to the driven shaft.

731,472. Electrically Controlled Speed Changing Mechanism. Leon J. Le Pontois, New York, N. Y. Filed September 19, 1902. Serial No. 124,065. (No model.)

Claim.—1. In an apparatus of the character described, independently operable driving shafts adapted to impart longitudinal movement one to the other, and means for imparting such longitudinal movement.

731,473. Means for Supporting Power Transmitting Mechanism. Leon J. Le Pontois, New York, N. Y. Filed November 28, 1902. Serial No. 133,035. (No model.)

Claim.—1. In combination with power transmitting mechanism, a spring, supports for said spring, and a rocking member interposed between said spring and said mechanism.

731,484. Charge Indicator for Secondary Batteries. Hiram P. Maxim, Pittsburg, Pa., assignor to Westinghouse Electric & Mfg. Co., a corporation of Pennsylvania. Filed August 4, 1902. Serial No. 118,382. (No model.)

Claim.—1. The combination with a battery and a motor, of a charge indicator having an armature and a magnet provided with an exciting winding, at least a portion of which is in series with the battery.

731,545. Motor Road Vehicle. Nicolas Cernatesco, Craiova, Rumania. Filed April 1, 1902. Serial No. 100,976. (No model.)

Claim.—1. Apparatus for converting a locomobile into a traction engine, comprising a frame composed of longitudinal girders, fixed crosspieces connecting said girders at their front and rear ends, and cross bars connecting the girders at their centre and

movable longitudinally for the purpose specified.

731,677. Rubber Tire. Christian Grotz, Akron, Ohio. Filed April 30, 1903. Serial No. 154,965. (No model.)

Claim—1. A combined metallic and elastic tire consisting of a comparatively flat metallic tire provided with ridges projecting therefrom and extending circumferentially thereto in combination with an elastic tire to inclose said metallic tire and ridges and rest thereon, of a longitudinal wire arranged to be embedded in said elastic tire and transverse wires embedded in said elastic tire arranged to inclose said longitudinal wire and to be supported by the ridges of said metallic tire.

731,740. Commutator Brush. Norman C. Bassett, Lynn, Mass., assignor to General Electric Co., a corporation of New York. Filed March 24, 1902. Serial No. 99,625. (No model.)

Claim—1. In combination, a commutator brush consisting of a block of electric conducting material curved on the arc of a circle, and a brush holder having a surface along which said brush is fed.

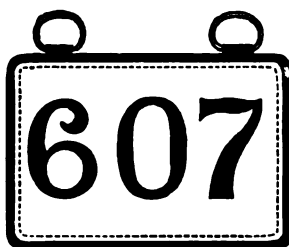
731,753. Brake for Motor Road Vehicles. Ferdinand Charron and Leonce Girardot, Paris, France. Filed March 22, 1902. Serial No. 99,459. (No model.)

Claim—1. A brake for motor cars and other vehicles comprising a friction pulley made integral with the chain wheel which drives the main wheel of the vehicle, in combination with two metallic brake blocks and ar-

ranged in the interior of the pulley, pivoted one to the other by one of their ends and supported by a small rod pivoted itself to the axle of the vehicle, in combination with a spring which connects the free ends of the brake blocks, in combination with a bent lever pivoted to the free end of the brake block, and the small arm of which is connected to the free end of the other brake block by an adjustable rod, while the long arm is attached to the pulling cable, substantially as and for the purpose set forth.

731,755. Vehicle Running Gear. George H. Condit, New York, N. Y. Filed January 19, 1903. Serial No. 139,549. (No model.)

Claim—1. In a vehicle, forward and rear axle members, a longitudinal spring system on each side of said vehicle, a frame, one of said spring systems attached rigidly to said frame and the other loosely attached thereto.



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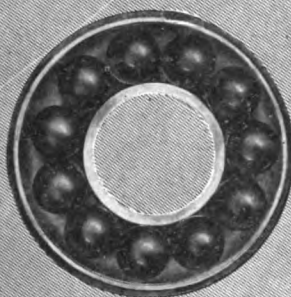
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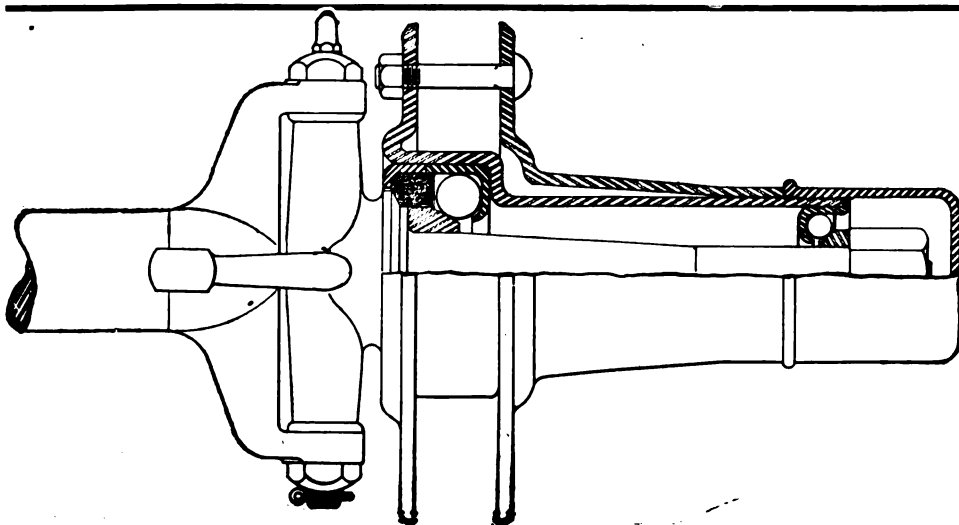
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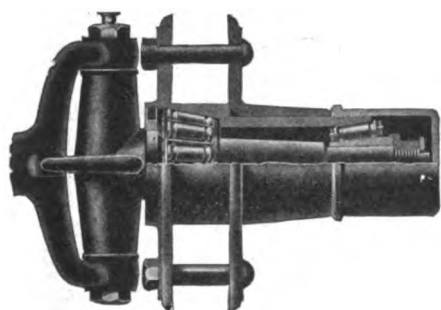


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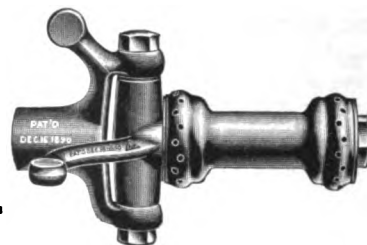
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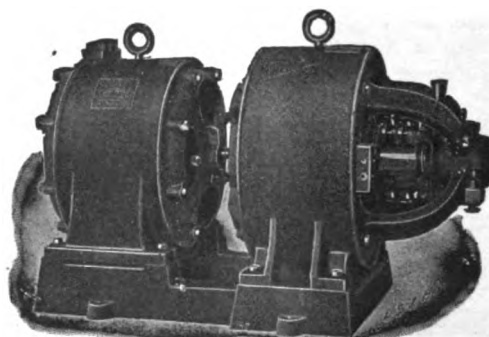
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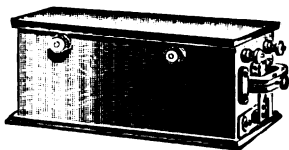


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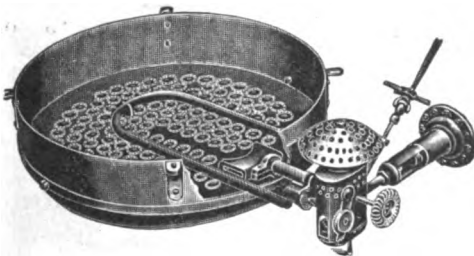


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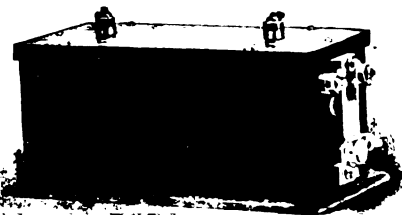
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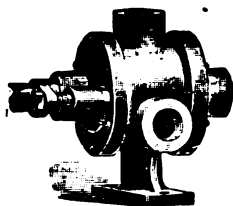


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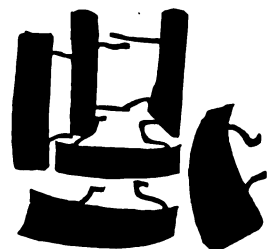
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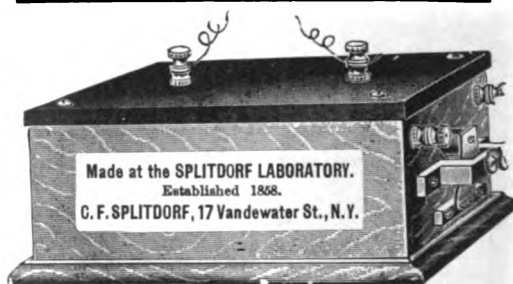
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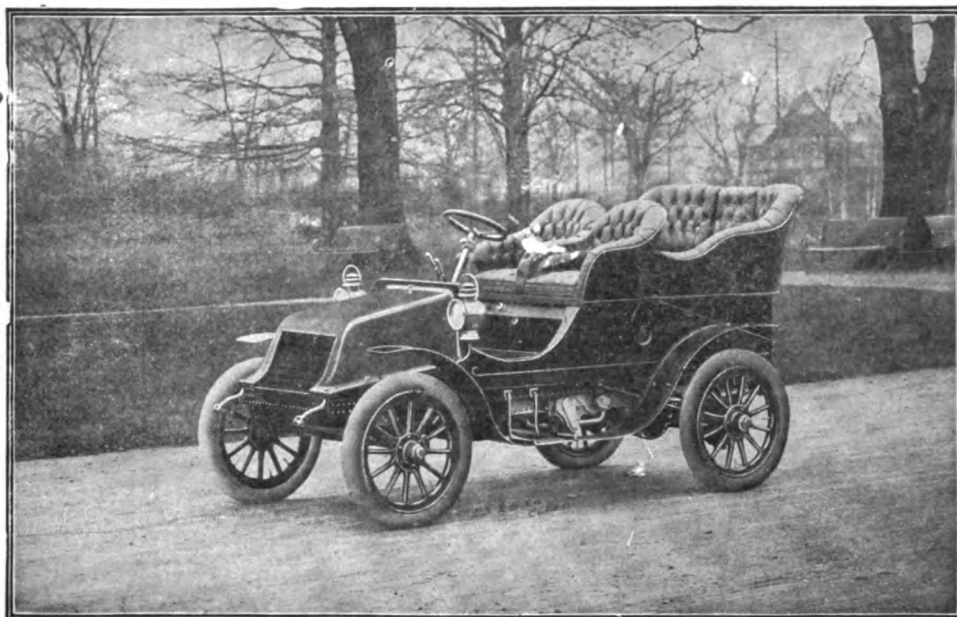
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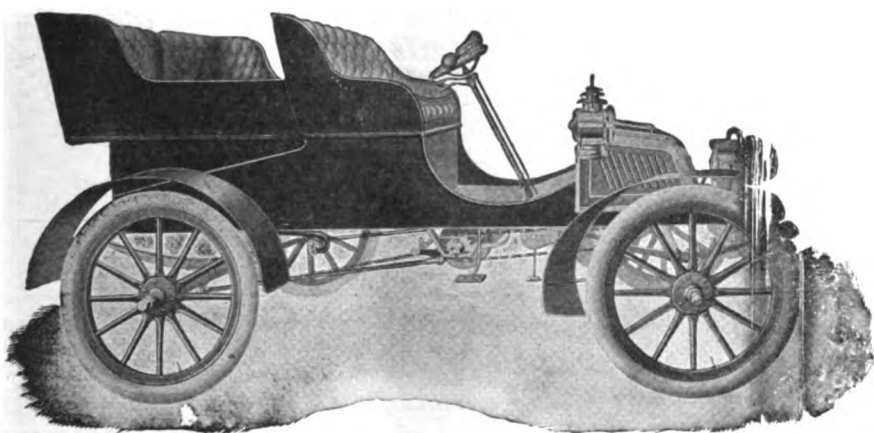
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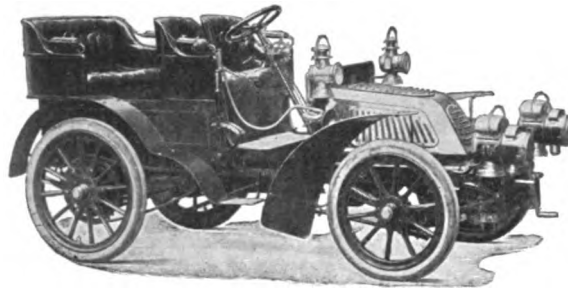
**ELMORE MANUFACTURING COMPANY, Clyde, Ohio.**

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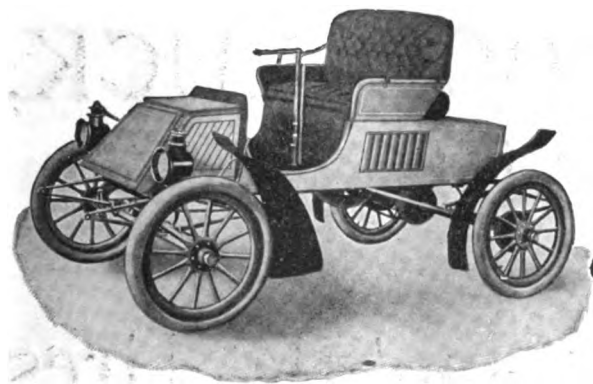
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**N. B.**—Owing to the great amount of detail work involved in verifying and compiling numberless route reports from the several hundred **BLUE BOOK** representatives the publication of the book will be delayed until the first of May. In the meantime—as always—special reports and information will be gladly and promptly furnished to subscribers.

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is the best evidence of the success attained. RAMBLER horse power is actual, not estimated; practical, not theoretical and is sufficient to drive the carriage anywhere. RAMBLER construction means long life and little trouble, both good things to have. Our booklet "W" is yours for the asking; it explains the carriage thoroughly.

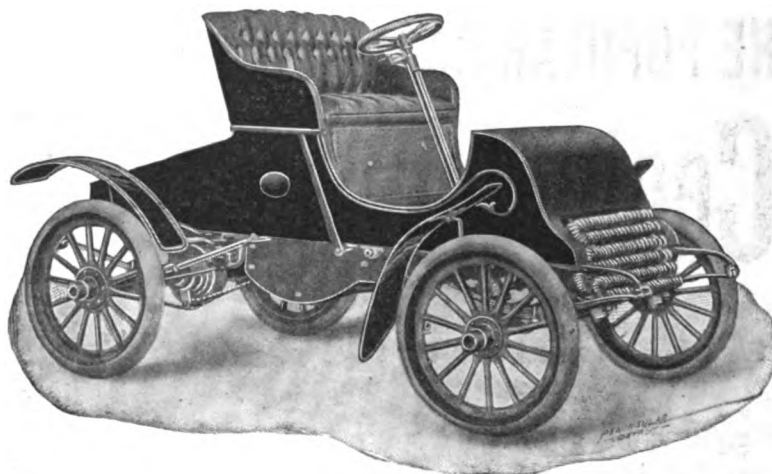
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Simple control—Free from complications—  
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## Runabout or Touring Car

the man who makes a purchase without giving heed to  
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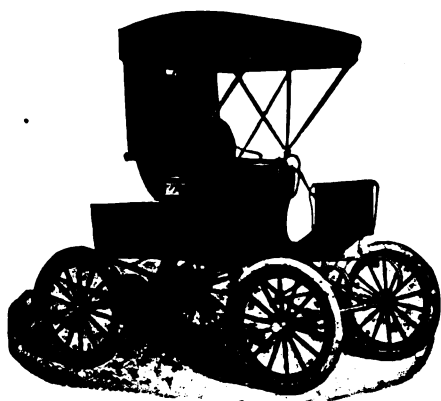
# CONRAD

is closing his mind to some  
hard, cold facts and figures.

IF YOU ARE NOT "GOING IT BLIND," WE WILL  
BE PLEASED TO PLACE THEM BEFORE YOU.

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A swift, smooth run and a safe return characterize

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per hour on a country road or on a prepared track, the PEERLESS can be easily guided. The quickness and accuracy with which the wheels respond to the movement of the steering wheel will give the Peerless Racer a great advantage in the race for the Gordon-Bennett Cup, for the steering gear as well as the vertical motors, bevel gear transmission, etc., are alike in the racer and the touring car.

The direction of the front wheels is regulated through a steel rod connecting at a knuckle joint, giving direct and instantaneous action. The construction of the steering gear is such as will not allow obstructions or depressions in the roadway to change the course of the car.

It is possible to round corners safely at almost full speed, as the steering arms connected to the lower part of the steering knuckles make the inner wheel describe a smaller circle than the outer one, thus preventing the car from skidding.

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READY FOR DELIVERY ON SHORT NOTICE**

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ORDERS TAKEN FOR AUGUST DELIVERY**

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Again the genuine detachable G & J Tires demonstrate they are the fastest and most reliable automobile tires in the world.

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OLDFIELD'S RECORD AT COLUMBUS, O., JULY 4, 1903.					
1st mile,	.	56 2-5	One mile,	.	.56 2-5
2nd "	.	59	Two miles,	.	1.55 2-5
3rd "	.	59 3-5	Three "	.	2.55
4th "	.	1:00	Four "	.	3.55
5th "	.	59 3-5	Five "	.	4.54 3-5
6th "	.	59 3-5	Six "	.	5.54 1-5
7th "	.	1:01	Seven "	.	6.55 1-5
8th "	.	1:00	Eight "	.	7.55 1-5
9th "	.	59 3-5	Nine "	.	8.54 4-5
10th "	.	1:00	Ten "	.	9.54 4-5
<hr/>			<hr/>		
TOTAL,	.	9.54 4-5	Mile Average,	.	59 4-5

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# G & J TIRES

being fitted on your automobile.

They will be furnished by manufacturers and dealers everywhere.

## G & J TIRE Co.

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## The NEW WHITE STEAM TONNEAU for 1903



### NEXT TO FLYING

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WITH A  
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BEHIND  
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EVERY STUDEBAKER sold has meant a satisfied customer. It makes friends and keeps them. Agents and dealers in territory we have not already covered should write for our catalog and terms. Our machines are unsurpassed for hill climbing and quiet running. They are built by a firm whose reputation is a guarantee of good work. What Studebaker stands for is known to every prospective customer for an automobile.

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Factory and General Offices, South Bend, Ind.

# "REBER" MOTOR CAR

"AS GOOD AS MONEY CAN BUY."

Order a sample now.

We can make  
reasonably prompt  
delivery.

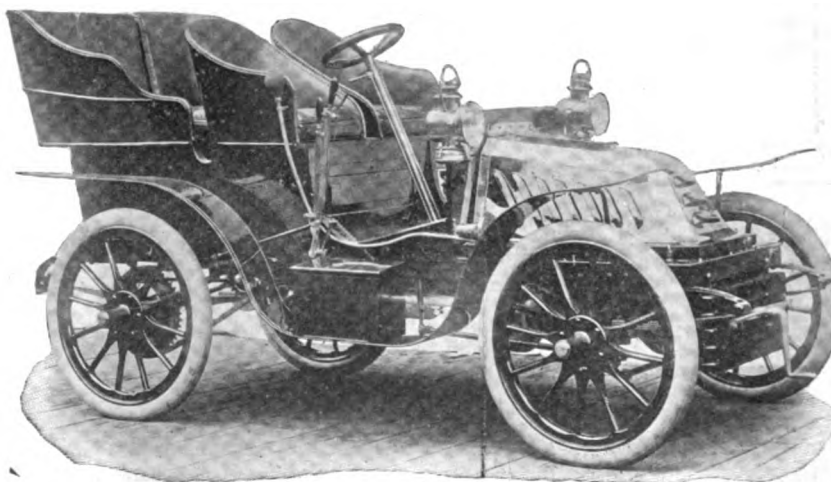
Three forward  
speeds and reverse.

Ample power for  
full loaded capacity  
on 25% grades.

Speed, 30 or more  
miles per hour.

Good reliable agents wanted in unoccupied territory.

Write for catalogue giving full particulars, terms, etc.



TYPE IV.

Model A.

PRICE  
\$1800.

**ACME MOTOR CAR CO.,**  
READING, PA.

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A Touring Car for those who desire the very best that money will buy.

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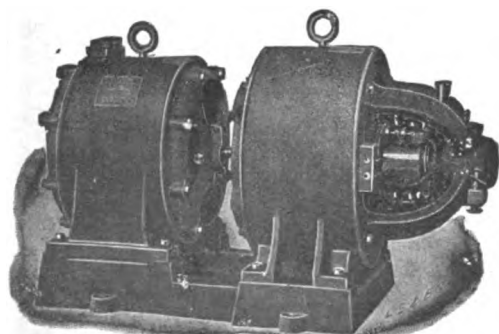
The cut represents our latest improved Celular Cooler. It is the most efficient and up-to-date radiator made, and is less expensive than anything of similar construction.

We also make Disc Radiators and we aim to make them the best on the market.

The Whitlock Coil Pipe Co.

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Convertor for Charging Automobile Batteries from Alternating Current.

CLEVELAND, OHIO,

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**Electrical**

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# Locomobile

OWING to the demand for our Gasolene Touring Cars, it has been necessary to operate our large factory at full capacity day and night all this year. We are now prepared to make deliveries on the four-cylinder 16 H. P. Model in 30 days from date of order.



The four-cylinder 16 H. P. Locomobile shown above is remarkable for its smooth and noiseless operation at all speeds; for its hill-climbing ability; ease of control, and for the excellent design throughout. It is faster than many cars of a greater rated horse-power. The mechanical details are in accordance with the latest and best practice; the workmanship is thoroughly good, and a striking feature of the car is the ease with which all parts may be gotten at.

We have on hand all styles of bodies ready for finishing in any desired colors.

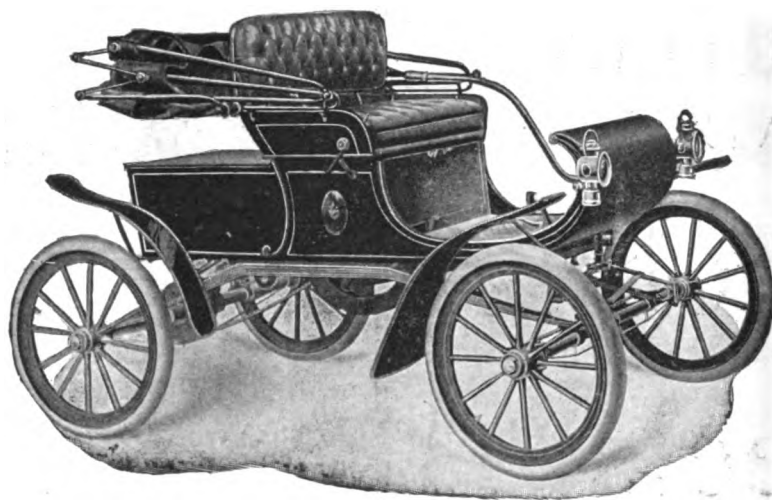
Write to our factory, or to any branch office, for further information, photographs, or to arrange for a thorough demonstration.

The *Locomobile* Company of America,

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all the time; its simple mechanism leaves "Nothing to watch but the road," and its strong construction proves it is "built to run and does it."

**PRICE, \$650.00.**

Any of the following automobile dealers will gladly give you a practical test on the road.

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COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
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GRAND RAPIDS, MICH.—Adams & Hart.  
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PITTSBURGH, PA.—Banker Bros. Co.  
POUGHKEEPSIE, N. Y.—John Van Benschoten.  
RALEIGH, N. C.—Raleigh Iron Works.  
ROCHESTER, N. Y.—Rochester Automobile Co.  
SAN FRANCISCO, CAL.—Locomobile Company of the Pacific.  
SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.  
TEXARKANA, ARK.—J. K. Wadley.  
TUCSON, ARIZ.—Seager & Close.  
WASHINGTON, D. C.—National Capital Automobile Co.  
HAWAIIAN ISLANDS—R. N. Halstead, Honolulu.  
GREAT BRITAIN AND IRELAND—Locomobile Co. of Great Britain, Ltd., London, Eng.  
GERMANY—(All Germany except Cologne)—E. Ernest Weigaertner, Berlin; Cologne L. Welter & Co.

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WRITE FOR ILLUSTRATED CATALOGUE TO

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FACTORIES: DETROIT AND LANSING, MICH.

# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, July 9, 1903.

No. 15

## FOSTER IS IN TROUBLE

**Creditor Gets Judgment by Default—Office and  
Factory are Closed.**

Judgment by default in the sum of \$570 was secured last week by Fred S. Todd against the Foster Automobile Mfg. Co., Rochester, N. Y. Claims of employes of the concern aggregating \$1,500 have also been filed and an action to secure judgment has been brought under them. The factory of the company has been closed for some time and the office for about two weeks.

The Todd action was brought in the Rochester Municipal Court. Judgment was given, a warrant of attachment was issued and goods equal in value to the claim were seized. Attorney Oviatt, for Todd, said that they secured the order for a warrant of attachment a week previously, and had been trying to serve papers on Park Densmore, the manager and chief owner, or upon one of the directors ever since, but were unsuccessful. Mr. Oviatt stated that so far he had been unable to learn the directors' names, and understood that Densmore and family were in Erie, Pa., where Densmore formerly resided.

Attorney Henry Fish, of Erie, who was in Rochester last week, said that as Densmore's lawyer he was prepared to announce that Densmore would shortly return to Rochester, reorganize the company, increase the capital stock and conduct the business on a much larger scale than it has been run in the past.

The Foster Automobile Co. was organized in 1897 for the manufacture of steam and gasoline automobiles. It was capitalized at \$75,000. Up to three years ago G. G. Foster, W. B. Armstrong and E. D. Martin were among the largest stockholders. At that time Park Densmore came to Rochester and purchased all of the stock held by these gentlemen and they withdrew. They have had no connection with the business since that time.

Until last winter, when a gasoline car was exhibited at the Madison Square Garden Show, the Foster Company confined

themselves to the manufacture of steam vehicles. A few months ago it was announced that arrangements had been made to reorganize the company, but it appears to have been premature. The present trouble was not unexpected.

### Shelby to Sell Direct.

Cold drawn, seamless steel tubing of the well known Shelby sort can now be bought by automobile manufacturers direct from the Shelby Steel Tube Co. of Pittsburg, Pa. This concern, as makers of the raw material, has deemed it advisable to deal this year direct with the manufacturers who use the product. Heretofore the Federal Mfg. Co. acted as selling agent for the Shelby Co.

### Remington Affairs Up Again.

At Utica, N. Y., last week Referee Comstock gave a hearing in the case of the Syracuse Supply Co., Ltd., vs. the Remington Co., bankrupt. The suit was brought to recover certain property concerning the sale agreement, of which there seemed to be a misunderstanding. No decision was reached.

### Lamp Makers Enlarge.

Gray & Davis, the well known automobile lamp makers, of Amesbury, Mass., have enlarged their plant. Increased business compelled the move. This firm lists twenty different styles.

### Formed at Lansing.

The National Supply Co. has been formed at Lansing, Mich., and will carry a line of automobiles, carriages, etc. They will be located at Michigan avenue and Grand street.

### Goes with E. V. Co.

A. B. Henley has joined the forces of the Electric Vehicle Co., in the capacity of traveler. He was formerly with the American branch of A. Clement in a similar capacity.

### Scott Goes Into Bankruptcy.

The J. A. Scott Motor Works, St. Louis, Mo., have filed a petition in involuntary bankruptcy. The concern made motors, parts, etc.

## ASKS FOR MORE TIME

**Century Motor Vehicle Co. Advises Creditors  
That it is Financially Embarrassed.**

The Century Motor Vehicle Co., Syracuse, N. Y., is financially embarrassed. Formal notice of the fact has been sent to the creditors in a letter, in which the company goes on to say:

"Two actions have been commenced against us, and others are threatened. We have on hand a large amount of new machinery and a large amount of stock in process of manufacture, but we have been disappointed in not getting all the parts for machines when needed, and therefore have not been able to turn them out as rapidly as anticipated.

"There is practically an unlimited demand for our machines at a good profit, but if our creditors insist on immediate payment we will be forced to the wall. We wish not to permit any preferences among our creditors, therefore send you this notice before any judgments can be taken.

"You are respectfully requested to attend a meeting of our creditors at our factory, Nos. 517-521 East Water street, Syracuse, N. Y., on Friday, July 10, at 2 o'clock p. m., and to take such action in the premises as to you shall seem advisable."

The Century Co. was organized by Syracuse business men several years ago to manufacture steam, gasoline and electric vehicles. Until within a year it confined itself to the production of the first mentioned type. Then the Century Tourist gasoline car was brought out, and it was understood that a good trade, both here and abroad, had been built up in it. Manufacturing difficulties restricted the output, however, in spite of an enlargement of the factory, and this led to the embarrassment.

The officers of the company were C. F. Saul, president; Frederick H. Elliott, secretary and treasurer, and William Van Wagoner, engineer and manager.

The Motor Cycle Mfg. Co., Brockton, Mass., makers of motor bicycles, went into the hands of a receiver last week.

## ARDENNES RACE DISAPPOINTS

### Last Year's Time Barely Beaten by Higher Powered Cars—Tire Troubles.

Paris, June 26.—Since the Paris-Madrid disaster awakened the public to the danger of driving powerful cars at high speeds over a course that is not properly organized for such a contest it has become an extremely delicate matter to speak of racing in any shape or form. Even in Belgium feeling was so strong that the Automobile Club deemed it advisable to postpone the Ardennes Circuit until a new set of regulations could be enforced, but, singularly enough, while the organizing club preferred to err on the side of extreme caution, the municipal authorities in the Ardennes would not hear of such a postponement, and they insisted that the meeting should be held on the date originally fixed.

At first it looked as if this change of fixtures was going to entirely spoil the success of the Ardennes meeting. The leading French makers felt that they could not compete in another race so soon after the lamentable events of a month ago. They accordingly all abstained, and the meeting would have made a very poor show indeed if it were not for the number of vehicles entered by private owners. It was a critical moment for the sport. The slightest accident due to defective organization would have intensified the outcry against automobile racing, and to this extent the fate of the sport hung in the balance. On the other hand, if the meeting ran off without a hitch it would show people that racing was still possible on a circular course; not only possible, but logical and even necessary, for when the sporting instinct is so strong among a certain class of automobilists, and speed contests are of great value to manufacturers themselves, it is obviously impossible to suppress racing altogether. There is no more danger in racing on circular courses in out of the way parts of the country than on inclosed tracks, and such racing is of infinitely more value to the makers themselves, at the same time that it is an important source of revenue to the towns and villages along the route. It is therefore very gratifying that the Ardennes meeting should have been such a pronounced success. The industry was well represented and the races went off without a single serious accident. What is more, it was a considerable source of profit to local trade and, so far as the Ardennes Circuit is concerned, there does not seem to be any reason for doubting that it will become an annual event.

The race took place over the same course as last year, starting from Bastogne and running round by way of Longlier and Habay-la-Neuve. It was covered six times

to bring up the total distance to 318 miles. The big cars competed in the morning, and the light carriages raced in the afternoon, while on the following day a race was organized for voiturettes and motor cycles over another course, taking in a part of the Bastogne route and starting from and finishing at Arlon, a town near the Luxemburg frontier. There were twenty-six big cars competing and, though the leading makers were not officially represented, several of their cars were running, the De Dietrich being piloted by C. Jarrott, the winner of the Circuit last year, and De Brau; Panhard by Baron Pierre de Crawhez, and Mors by W. J. Vanderbilt, jr., and Mr. Terry. A couple of Wolseley cars were also competing, as well as an English Star, but they all had bad luck, the Star being upset and the Wolseleys making anything but a brilliant display.

The two things chiefly noticeable about the contest were the considerable proportion of failures and the fact that, despite the higher powers used in some of the cars, only one competitor beat last year's record by less than two minutes. A great many of the competitors were put out of the race by tire troubles. The behavior of some of the tires was extraordinary. In some cases the treads were completely stripped off, leaving the fabric bare. After changing his covers four times, Jarrott gave up at a moment when he seemed to be in a fair way of repeating his performance of last year, for his De Dietrich was running remarkably well. For the same reason the big Gobron Brillié had to abandon the race, and M. Gobron was highly indignant at the way in which he was served by the tires. The speeds attained were also somewhat disappointing, for it had been supposed that on a circular course, where there are no neutralizations, the vehicles would be able to attain their maximum speed, but events proved that with the numerous sharp turnings, which necessitate frequent braking and cutting out of ignition, the cars cannot do their best on the Ardennes Circuit.

As is usual in these races, there was plenty of sensationalism while waiting for the passage of the cars, as any accident becomes exaggerated and distorted while the news is travelling along the course, and by the time it reaches the controle a man who breaks a collarbone is dead. It was reported that Vanderbilt and Terry had collided and that both were badly injured, but later on "Willy K." turned up with a cylinder head of his engine cracked. Of course, he had not collided with Terry, who had driven his car into a ditch, and the vehicle itself was driven to Bastogne in the afternoon with the front axle bent. Mr. Terry and his mechanic were thrown out in the accident, but they escaped with nothing worse than a shaking. Meanwhile the only competitors who were doing the laps in regular times were Baron Pierre de Crawhez (70 h. p. Panhard), De Brau (45 h. p. De Dietrich), Girardot (C. G. V.), Guders (Pipe),

Coppé (Germain), Voigt (C. G. V.), Le Blon (Gardner-Serpollet) and Béconnais (Darracq). The others were spending time on the road in tire repairs. De Crawhez covered the full distance of 318 miles in 5 hours and 52 minutes, which represents an average of fifty-four miles an hour. He beat Jarrott's record by less than two minutes. Girardot sustained his reputation as the "eternal second" by finishing in 6 hours and 12 minutes, and then came De Brau in 6 hours and 24 minutes, Le Blon in 6 hours and 31 minutes, Béconnais in 6 hours and 45 minutes, Coppé in 6 hours and 57 minutes. Voigt in 7 hours and 4 minutes, and Guders in 7 hours and 10 minutes. Only nine vehicles out of twenty-six completed the course before the control closed.

Among the light carriages the results were a little more satisfactory, though here again only seven finished out of sixteen starters. A very fine performance was accomplished by Baras on a Darracq, his time for the 318 miles being 6 hours and 30 minutes, beating a Gobron-Brillié, driven by Tavenaux, by 26 minutes. Then came an Italian car, Fiat, piloted by Cagno, in 7 hours and 6 minutes, followed by two Darracqs and two De Dion-Bouton cars.

It is perhaps to be regretted that in races a good many of the competitors give up when they see they have no chance of getting well up in the list of arrivals. This conveys a rather bad impression, as when such a large proportion of the cars fail to finish the public are led to believe that they have hopelessly broken down, while if they manage to get over the course it proves reliability and the effect upon the public is much more satisfactory.

### Ostend Week Next.

With the Gordon Bennett race and its supplementary events out of the way, the next, and in fact the only, big European fixture is the Ostend week. The programme is as follows:

- July 12—Speed races, about 100 kilometres. Ostend-Blankenberghe and return.
- July 13—Tourist trial on the same itinerary.
- July 14—Motor cycle race.
- July 15—Standing mile and flying kilometre races.
- July 16—Same races for tourist cars.
- July 17—Flower corso and elegance competition.

### Weight and Horse Power.

Louis Renault's light Renault car, which made second best time in the Paris-Bordeaux section of the interrupted Paris-Madrid road race, represented one horsepower for every twenty pounds of weight. The Mors heavy car, driven a few minutes faster over the 343 miles by M. Gabriel, represented one horsepower for every twenty-five pounds of weight.

At the Chicago Derby the race track officials set aside a reserve for automobiles. Which is right; in fact, it should be the custom at all first class tracks.

## CONTINENTAL RUBBER WORKS

**Erie Capitalists Form It and Buy Tribune Plant  
—Kelley and Palmer in.**

Charles F. U. Kelley, sales manager, and Theron Palmer, superintendent, have severed their connection with the Pennsylvania Rubber Co. and organized the Continental Rubber Works, of Erie, Pa., with a paid-up capital of \$200,000. The Tribune bicycle factory has been bought outright from the receivers of the American Bicycle Co., and plans are already under way to transform it into one of the finest and most up-to-date rubber works in the country.

The new concern is reported to have very strong financial backing, numbering among its stockholders some of the most wealthy and influential citizens of Erie. A full line of high-class bicycle and automobile tires will be manufactured, and, in addition, mechanical rubber goods of every description.

The company starts out under the most favorable auspices. Mr. Palmer is a rubber man of recognized ability, having been assistant to the superintendent of the Goodrich company for many years, and his record since has been too well known to need extended mention.

There are few men more widely known or genuinely liked than C. F. U. Kelley, mention of whom was made in these columns a few weeks ago. Mr. Kelley's acquaintance in the trade extends from the Atlantic to the Pacific. He has that rare faculty of making personal friends of nearly all his customers, is a convincing and enthusiastic salesman and a hard worker.

Machinery will be installed at once, and as there will be no building delays the company confidently assert that it will be able to take care of all orders for the coming season.

### Past the 6000 Mark.

Upward of six thousand licenses have been issued up to date by the Automobile License Bureau at Albany, N. Y., and the bureau has at no time been nearer abreast of its work than twenty-four hours. Applications continue to pour in at the rate of 125 a day. It is estimated that the receipts for the first half of the year will be about \$5,000. Included in the six thousand or more licenses are something like twenty-two hundred of the old licenses which have been renumbered under the provisions of the Bailey law.

### Carload of Autos on Roof.

After a search all over Eastern railway lines for a carload of automobiles shipped from an Eastern factory which had been missing nearly thirty days, the firm at Dallas, Tex., to which they were consigned received a telegram on June 25 that the car had been found, with others, piled by the flood on the roof of a building in East St. Louis. The automobiles are said to be nearly ruined.

## Recent Incorporations.

Denver, Colo.—Automobile and Repair Co., under Colorado laws, with \$10,000 capital. Incorporators—James H. Nichols, Jr., Orrin T. Higgins and George P. Hering.

Pittsburg, Pa.—The Co-operative Automobile Association, under Pennsylvania laws, with \$5,000 capital. Directors—W. A. Donkin, F. E. Jackson, H. C. Mufford, L. C. Letzkins and G. C. Jackson, all of Pittsburg.

New Rochelle, N. Y.—New Rochelle Motor Co., under New York laws, with \$80,000 capital. Directors—Clifford Bonneville and Margaret Bonneville, New Rochelle, N. Y., and C. A. Solellac, Allentown, Pa.

Lansing, Mich.—The National Supply Co., under Michigan laws, with \$15,000 paid-up capital. President, J. F. Hammell; vice-president, A. F. Molitor; treasurer, A. A. Wilbur; secretary and manager, A. L. Harlow.

Trenton, N. J.—De Laski and Thropp Circular Woven Tire Co., under New Jersey laws, with \$100,000 capital. Incorporators—Albert De Laski, Weehawken, N. J.; Peter D. Thropp, Thomas H. Thropp, John E. Thropp, jr., and Frank W. Thropp, all of Trenton, N. J.

Fort Dodge, Iowa—De Loura Auto Manufacturing Co., under Iowa laws, with \$30,000. President, J. H. Abel; vice-president, L. E. Armstrong; secretary and treasurer, F. C. Minogue; general manager, H. E. De Loura. Directors—J. H. Abel, F. C. Minogue, John Gleason, F. V. Sherman, H. E. De Loura and Samuel Emms.

### All About Studebaker Electrics.

A wonderful amount of information concerning their electric automobiles is given in Catalogue No. 220 issued by Studebaker Bros. Mfg. Co., South Bend, Ind. It is illustrated with large and clear cuts of the several styles of vehicles made by the company. Consisting of only eight pages, bound in stiff paper covers, it is an example of the very best in the art of printing, and its contents are arranged admirably for the purpose of giving all information needed by persons considering the purchase of an electric automobile. The constructional features which distinguish Studebaker automobiles, some of them the result of the concern's long experience in building horse drawn vehicles, are fully set forth.

### Barney and G. & J. Tires.

The G. & J. Tire Co. have issued as a folder a fine halftone picture of Barney Oldfield in his famous "Red Devil" automobile, making his new world's records. His time, with some other interesting matter, appears on each side of the picture.

Babcock & Linn, No. 941 Eighth avenue, New York, have arranged to handle the Kirk car in the metropolitan district.

Six Peerless cars were received in one day by A. C. Banker, the Chicago agent.

## FISH TAKES CHARGE

**Files Bond for \$20,000 and Assumes Direction  
of Shelby Co's. Affairs.**

John C. Fish, who was last week appointed receiver for the Shelby Automobile Co., has filed a bond for \$20,000 and taken charge of the factory.

The failure has aroused considerable feeling in Shelby. G. M. Skiles, a local stockholder, has come out with a statement alleging that there has been gross mismanagement in both the mechanical and financial departments.

He goes on to say that in the former department this mismanagement resulted in a total inability to turn out two vehicles exactly alike. Continual changes were made in them, one being no sooner completed than departures in the design of the following one were made. He wants a thorough investigation of the defunct company's affairs.

### Fresno Motorists Get Together.

The motorists of Fresno, Cal., organized the Fresno Automobile Club on June 26. W. Parker Lyon was temporary chairman and F. Gregory secretary and treasurer. Other owners of automobiles who were present were F. M. Helm, E. C. Ward, O. E. Shepherd, S. N. Griffith, E. L. Chaddock, O. B. Oluffs, A. V. Taylor, M. R. Madary, Ed. Waterman and J. Wilbur Cate. The temporary officers were made permanent, and it was decided to endeavor to enroll all automobile owners in the neighborhood of Fresno. A committee, consisting of Messrs. Taylor, Madary and Lyon, was appointed to look into the matter of permanent headquarters for the club.

### Pins His Faith to the Locomobile.

A man with an abundance of sporting blood in his veins, and with abundant knowledge of the capabilities of his car, E. B. Martin, of the Martin Lumber Co., Chicago, has challenged two other motorists for a race. He offers to wager \$500 that his 16 h. p. Locomobile can show them its rear wheels. He has already defeated everything he has encountered, and is confident of continuing his victorious career.

### Route Royale Open.

M. Smet de Naeyer, Belgian Minister of Finance and Public Works, has informed the Belgian Automobile Club that the road from Ostend to Dunkirk, otherwise known as the Route Royale, is now open to motor traffic. This road, which cost \$250,000, is said to be one of the finest in Europe.

### British Columbia's Auto.

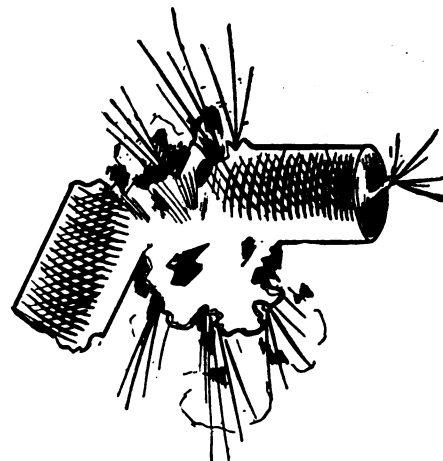
According to the Colonist, T. M. Brayshaw, of Victoria, has the honor of building the first automobile in British Columbia. It is an 8 horsepower machine, and the finishing touches were put to it on June 15.



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## Hail, Jenatzy!

Well, the great race has been run and there is glory enough and to spare for all concerned, except our countrymen, and even they, when all the facts come out, may be entitled to stand in the limelight. Jenatzy carries the cup to Germany. There is a peculiar fitness in this. France and Great Britain have had their inning, and now Germany has annexed the coveted honor. A student of chance would place his money on America for 1904.

In the handling of so big a project there were undoubtedly minor flaws and omissions of management, but, taking it all in all, the net result to all concerned is worthy of highest praise. It is particularly a matter for joy that no fatality befel either competitor or spectator. All Ireland made a holiday and noble and peasant were equally amused, excited, thrilled, recreated. Government and its thousand and one representatives

showed public spirit and patriotism. All told, the cup race of 1903 was a huge, a gigantic success.

The high honor of "first home" rested on a many-sided combination. It may be assumed, roughly, that all the cars were capable. For what maker would dare tempt disaster with hundreds of millions looking on? But beyond the car was the element of personal daring. This was ever present; every foot of the way bristled with possible disaster. This called for courage, and, so far as can now be judged, all the competitors displayed that quality in the full. Some men go bravely to battle. But here was a battle with peril and possible disaster and even death staring one full-face from start to finish. Truly, the race demanded courage, and Jenatzy had it.

But he also had something else. He had luck. We would not subtract one iota from his victory. We grant that his Mercedes was a thoroughbred and trained to the hour. We grant that he had high courage and a full measure of personal skill. But, after all, luck must also be counted in. Jenatzy had all the necessary factors, and then Dame Fortune crowned him with her choicest gift.

So, Hail, Jenatzy! Hail! Flying Demon of the Road! Jenatzy, the man with the good car, the man without fear, the man of great skill, the favorite of fortune!

## The Thorough Man.

There was one thing about the officers of the American fleet at Kiel that seemed to impress the Emperor William more than anything else, viz., their ability to answer any and all questions put to them, and that instantly. "They don't have to ask another officer, the one who is in immediate charge of the duty referred to," he is reported to have said.

It is this quality of thoroughness, of practical knowledge of detail, that distinguishes the high grade man from the ordinary kind. The former takes nothing for granted. He knows. He has been through the mill and is familiar with every process; hence his knowledge is at first hand.

In the automobile field there are many such men. They employ both brains and hands in their work, and it is infinitely better done by reason of that fact. To watch one of the class handle an automobile, or to dissect one in the endeavor to find the cause of an obscure trouble, is an education in itself. They go to the root of the matter, having the intuition that divines and the

knowledge that enables them to follow up their intuitiveness. They can give points even to good workmen, because to practical knowledge they add the largeness and comprehensiveness of the originating mind.

Such men are doubly valuable, and, being fitted to fill large parts in the world's economy, they make unqualified successes where other and less liberally endowed men achieve only partial ones. They are the true leaders of men and amply justify their selection.

## Besting the Scythe Bearer.

Oldfield—Barney of that ilk—and Father Time are out. The Scythe Bearer is mad clean through. Oldfield seems determined to ride a mile in something less than nothing; and, judging from the style in which he is mowing down the records, it is coronets to carrots that he will do it. On June 20 at Indianapolis he scored a fine record mile in 59.3-5. The record for a mile on a circular track was 1:01.3-5, so that the Indianapolis mile was the first under the even minute. That is its chief glory. At that same Indianapolis meet he flew the five miles in 5:03-5, eclipsing Winton's 5:30.3-5.

And now at Columbus on the Glorious Fourth Oldfield rides a mile in 56.2-5 seconds, five miles in 5:00.3-5 and ten miles in 9:54.4-5. As we remarked in a recent issue, what is to be expected when a special banked automobile racing track is built? Who will dare predict the mile result and the hour result?

## Aprons and Insurance.

One result of the prolonged period of rainy weather was the extensive use of waterproof aprons to protect the engine, transmission gear, etc., of gasoline and steam cars from mud and wet. They served their purpose, and thereby earned the thanks of their users. But they also brought in their train an evil of some magnitude, one that has still further prejudiced the insurance companies—already predisposed to view the automobile with jaundiced eyes—against these vehicles.

The aprons, being close to the muffler, frequently get the full benefit of the exhaust, and its fiery breath dries the fabric until it becomes almost like tinder. Sometimes the car is put away for the night with the apron in this condition, and is therefore ready for a conflagration. A spark is all that is needed, and a careless garage attendant frequently supplies this. Then, pouff! goes the apron, the flames extend to the gasoline and the car is damaged or ruined, and the garage also suffers. The

insurance company investigates, places the blame—sometimes on the apron, sometimes on the genus automobile—and proceeds to draw the lines tighter than ever.

An apron in this condition is a constant source of danger, as more than one motorist has learned to his sorrow. Remove the menace and an easier feeling will prevail, and the likelihood of a conflagration will almost disappear.

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### To Germany in 1904.

The majority opinion of the influential English papers is a hope that the Irish race, successful though it was, will be the last of its kind. The English were undoubtedly opposed to the event. They hate hurrah; they are conservative. The race meant hurrah and possible, even probable, fatality. But trade interests undoubtedly played a large part in obtaining official sanction of the race. Now that it is over, the English press points out that the game is scarcely worth the candle, that the expense of time and effort necessary to properly conduct so large a proposition is not justified by the result.

The English, in our opinion, are largely justified. And, when we take into consideration the teapot Irish course, they are wholly justified. But in 1904 the great event will be decided in Germany. On German territory there will be ample elbow room; and we may safely count on the Kaiser doing the handsome thing. And after 1904—well, 'tis best to wait. But we have in our mind's eye some different method of deciding the question of international motor-car supremacy.

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### Flaws and Constructional Defects.

The mishaps to the German and the English cars in the Bennett Cup race bring out the fact that even yet the metallurgical art has not reached an absolutely dependable stage. Wonderful advances have been made in the steel-making art during the past few years. Processes have been improved and cheapened, and it is now possible to obtain qualities especially adapted for almost any purpose that the user of the raw material may have need of.

But perfection is still far off. The insidious and accident-causing flaw is still abroad in the land. If we assume—and it is a reasonable assumption—that the two broken Mercedes axles were due to unsuspected defects in the steel, rather than to any error in design or construction, it will be seen that not even the most exhaustive tests will

guard against accidents of this nature. In the case of the English cars the breakage of the steering gear is rather more indicative of faulty design.

At the same time, the accidents referred to appear to lend color to the contention that the big racing cars have been shaved a bit too fine in the matter of weight. They must not exceed 1,000 kilogs; that is a written law that must not be violated. Yet designers are spurred on to produce more and more powerful cars, either in the belief that competitors are doing this, or because they think an advantage is thereby gained without any corresponding disadvantage being incurred. In this view they are scarcely supported by facts. In the Paris-Vienna race of last year, no less than in the Paris-Madrid race of the present one, the heavy cars have distinctly failed to realize expectations. When it came to the Bennett Cup race only the French cars made such a showing as to avoid a repetition of the catastrophe.

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### Chauffeur and Employer.

The chauffeur of the moment, the average chauffeur—not all, but many—bears all the earmarks of intimate contact with the foolishly rich, with the new rich. These, instead of making their way by kindness and character and personal force, simply buy it. They never get any service except by exorbitant purchase. The newly rich and the foolishly rich deal with chauffeurs in two ways. They hire them as part of the machine that is rented for a day or a week or a month, or they may employ the chauffeur outright as part of their personal entourage. When one of this class rents a machine he immediately makes play with the coin of the realm. He at once takes a cowardly position, particularly if the chauffeur has the splendid gift of personal force—and most workmen have that. Personal force, individuality, preponderance, is the birthright of the strong, and as most workmen are strong they as a class have this force. And note further that it is kept in good estate by sustained employment and effort.

So, between a foolishly rich person, or one playing that role, and the average chauffeur there is no question as to who is boss. The result is that the foolishly rich, the newly rich and the spurious rich, being unable to command, put their purses into play as the readiest way of winning the favor of the chauffeur. Now, any class which is sub-

jected to the tipping system degenerates. That is why one discovers so little honor, pride or high character among menials. Think of the waiter class as an example of what we mean.

So because of this system the chauffeur of the moment has degenerated into a "grafter," and none is subtler at that game. And if the graft be lean or not forthcoming at all, then there is sullenness and discomfort and even disaster. The sullenness is manifested in unwilling, uneven and disgruntled service. The discomfort is entirely on the part of the car passenger or car owner, and is produced by careless handling of the machine. The chauffeur, in the slyest possible manner, will bump you over ruts, will take you within an inch of a team, a telegraph pole, the edge of an embankment, and so on. He may even repeatedly stop and look long for imaginary defects. In brief, the chauffeur, in a patois which is unmistakable, ceaselessly and insistently intimates that the "long green" must be forthcoming.

From the above premises, which are based absolutely on conditions as they now are, two conclusions must be drawn. The first is that the man who is so intrinsically poor as to rely solely on the greenback is beneath contempt, is, in fact, in a class far below that of the grafting chauffeur. The second conclusion is that all honor is due the chauffeur who gives full returns for the wage paid, who delivers talent and patient and cheerful service, as nominated in the bond. That, indeed, is a form of honor which cannot be too highly commended. To give any other kind of service is to be debased.

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Makers of laws and ordinances occasionally bestow a modicum of consideration upon the owners of automobiles, and recognize the very evident fact that the automobile has enemies, by enacting a bit of legislation which is not designed to hamper the motorist. Pittsburg, Pa., has a new ordinance which provides that any person tampering with a machine while the driver is absent is liable to arrest.

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The Scottish Cyclist is authority for the statement that the fines of the motorists and automobilists of Great Britain aggregate £100,000 a month. And yet Joseph Chamberlain is talking of higher tariff. Just as if they needed any tariff with such an internal and infernal revenue.

## WORLD'S RECORDS BROKEN

Barney Oldfield's Meteoric Ten-mile Ride—  
Time Cut on Every Mile.

M.	New record.	Old record.	June 20, 1903.
1...	0:56 2-5	0:59 3-5	Oldfield, Indianapolis
2...	1:55 2-5	2:00 2-5	Oldfield, Indianapolis
3...	2:55	3:02	Oldfield, Indianapolis
4...	3:55	4:03 4-5	Oldfield, Indianapolis
5...	4:54 3-5	5:04 3-5	Oldfield, Indianapolis
6...	5:54 1-5	6:45 3-5	Winton, Cleveland
7...	6:55 1-5	7:38	Winton, Cleveland
8...	7:55 1-5	8:42	Winton, Cleveland
9...	8:54 4-5	9:45 1/2	Winton, Cleveland
10...	9:54 4-5	10:50	Winton, Cleveland

Oldfield's separate miles:  
First, 0:56 2-5; second, 0:59; third, 0:59 3-5;  
fourth, 1:00; fifth, 0:59 3-5; sixth, 0:59 3-5; seventh, 1:01; eighth, 1:01; ninth, 0:59 3-5; tenth, 1:00.

Columbus, Ohio, July 4.—Barney Oldfield was the bright particular star of the automobile race meet held at the Driving Park to-day. Other events there were, but Oldfield was the hero, and all Columbus is talking about him to-night. Oldfield gave two exhibitions during the afternoon. The first was a shy at the five mile record, which he cut from 5:04 3-5 to 5:00 3-5.

But this was merely an appetizer, for later in the day he swept the slate clean from one to ten miles. At the first distance he did 0:56 2-5 and lopped 3 1-5 seconds off the old record, his own; in fact, the second mile, ridden in 0:59, was also better than the old record. At the five miles he made a cut of 10 seconds exactly, and at ten miles he beat the old figures' 55 1-5 seconds. Eight thousand people saw these wonderful speed trials. Oldfield flew about the track like a thing possessed, swung madly around the turns and threw up a cloud of dust. The spectators simply went wild, and when Oldfield was introduced as the King of Automobilists they gave him a royal shout.

The meet was projected by the Columbus Automobile Club, and all the members, as well as the Driving Park authorities, are delighted over the affair, for, besides a good day's sport, there was a handsome surplus. As has been said, Oldfield monopolized the attention of the 8,000 spectators. When he appeared on the track with his "Red Devil" they were all agog. He amply justified all expectations; in fact, his trials worked the spectators up to the highest pitch, and when the record results were announced they made their enjoyment and appreciation quite plain. Oldfield used, of course, the Ford machine and the G. and J. tires.

The other events filled out a rather generous programme. The three mile event for the 1,200 to 1,800 pound gasoline class produced the most exciting finish of the day, D. M. Huss winning by a length in 4:55 4-5. Dixon, the second man, kept Huss moving from start to finish, and was never more than a length away. Summaries:

Three miles (gasolene, 1,200 to 1,800 lbs.)

—D. M. Huss, Olds, 4 1/2, first; J. F. Dixon, General, second. Time, 4:55 1-5. Six starters. Won by a length.

Five miles (cars under 1,800 lbs.)—Dr. C. M. Taylor, first; E. M. Lied, second. Time, 8:28.

Five miles (scratch, open to all)—William Moneypenny, first; J. F. Dixon, second; Dr. C. M. Taylor, third. Time, 7:36.

Five miles (open, gasolene, under 1,800 lbs.)—William Moneypenny, first; William Niel, second. Time, 7:45.

Five miles (motorcycle)—Won by E. A. Neff in 8:35. There were three starters, but the others dropped out early in the race.

Three miles (machines 1,200 to 1,800 lbs.)—D. M. Huss, first; J. F. Dixon, second. Time, 5:10.

Ten miles (handicap)—Huss, first; Moneypenny, second. Time, 15:28.

## Cooper's Motor Went Wrong.

A big crowd from all parts of Kentucky was at the track of the Kentucky Horse Breeders' Association in Lexington on Saturday last to witness the automobile races held under the auspices of the Indianapolis Automobile Racing Association. There was one big disappointment in store for them, as Tom Cooper was unable to make his promised five-mile dash to lower the world's record of 5:04 4-5. He had the misfortune to break one of the pistons of his machine, and this prevented his making fast time. Another disappointment was the failure to run the race of five miles for 2,000 pound machines, which had been arranged especially for the Chicago tourists who were on their way to the Mammoth Cave, but who declined to remain over for the races.

The first race was for 1,200 pound machines, five miles, open to all. There were three entries, all from Lexington. Will Muir won in 11:02 1/4, beating Frank Searce and C. O. Updyke.

In the second event, a five-mile match race between Earl Kiser, of Dayton, and Carl C. Fisher, of Indianapolis, Kiser won, his time being 8:09 1/4.

The other race run was a five-mile handicap, the contestants being Earl Kiser, Dayton; Carl C. Fisher, Indianapolis; Jack Graham, Chicago; Andy Keenan, Cincinnati; J. D. Neave, Cincinnati, and Frank Searce, Lexington. Graham, who had a three-minute handicap, won in 11:05.

## Detroiters Want Uniformed Cops.

Members of the Detroit Automobile Club have determined to do their individual utmost to secure a more liberal interpretation of the ordinance governing the speed of automobiles. They will also endeavor to persuade Police Commissioner Fowle to put his bicycle cops in bright uniforms so that chauffeurs may be spared the mortification of being stopped by persons bearing the appearance of more or less disreputable scorchers and compelled to give their names. They fear that some of these days bicyclists looking for fun will hold them up on pretense of being policemen.

The club will hold an automobile race meeting in the latter part of August. The membership of the organization is now over fifty and is steadily increasing.

## OLDFIELD BEATS COOPER

## Five Mile Race at Fort Wayne—The Champion Wins in Straight Heats.

Barney Oldfield was the star at the automobile races held at Fort Wayne, Ind., on June 27. It was Fort Wayne's first experience in automobile racing. After the regular card was exhausted, Oldfield, who won the race with Cooper which ended the programme, rode an exhibition mile against his own record of 59 3-5 seconds made at Indianapolis. He made the mile in 1:01, and started around again, but his machine was running hot and he gave it up. Summaries of the regular events follow:

First event, five-mile race for Oldsmobiles—Harry Meyer, first; Duncan, second; Benson and Carl Meyer distanced. Time—First mile, 2:46; second mile, 2:31; third mile, 2:35 1/4; fourth mile, 2:33; fifth mile, 2:29; five miles, 12:55 1/4.

Second event, five-mile race for Ramblers—Kiplinger, first; Randall, second; Schulz, third; Collier distanced. Time—First mile, 2:25; second mile, 2:13; third mile, 2:21; fourth mile, 2:17; fifth mile, 2:17; five miles, 11:33.

Third event, exhibition race by W. E. Griffin in Winton touring car—First mile, 1:47; second mile, 1:43; third mile, 1:42; fourth mile, 1:42; fifth mile, 1:42; five miles, 8:36.

Fourth event, free for all, five miles, for automobiles weighing 1,250 pounds and under—Harry Meyer, first; Kiplinger, second; Collier distanced. Time—First mile, 2:05; second mile, 1:50; third mile, 1:55; fourth mile, 1:58; fifth mile, 1:59; five miles, 9:47.

Fifth event, five-mile race between Barney Oldfield and Tom Cooper (two heats)—Oldfield, 5:26, 5:20; Cooper, 5:34 1/2, 5:36 1/4. Time by miles—First heat: Oldfield, 1:07, 1:02, 1:07, 1:05, 1:05; Cooper, 1:04 1/2, 1:04 1/2, 1:10, 1:10, 1:05 1/2. Second heat—Oldfield, 1:05, 1:03, 1:04, 1:04, 1:04; Cooper, 1:03 1/2, 1:07 1/2, 1:08 1/4, 1:08, 1:08 1/4.

## Louisville's First Race Meet.

What were practically the first automobile races ever held in Louisville, Ky., were the feature of the annual picnic of the Masons on St. John's Day. The picnic was held at Fountain Ferry Park on June 24. In the first race Dr. James B. Bullitt and Dr. J. S. Butler, in cars weighing less than 1,200 pounds, started for a mile run, Dr. Butler scoring an easy victory in 2:52, his opponent failing to finish. A two-mile race between Dr. W. T. Durrett in his 800-pound machine and M. Emler in one of 1,200 pounds was not determined. Both machines had troubles and were taken from the track.

The most interesting race of the afternoon was a two-mile race between J. Kemp Goodloe, in a 1,700-pound car, and George H. Wilson, in an 1,100-pound machine. The distance was three miles. Goodloe won handily in 4:15, which is a speed of 85 seconds to the mile.

Ira S. Barnett won from T. Lindsey Fitch in a two-mile race in 2,200-pound touring cars. Time, 4:19.

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## CUP RACE AFTERMATH

### Later Reports Merely Bear Out Motor World's Story—Kilometer Records Shattered.

The British Automobile Club's speed trials at Phoenix Park on July 4 drew large crowds. The main interest was in the attacks on the flying kilometre record. Baron de Forest won the One Hundred Guinea Challenge Cup offered for the fastest car weighing under 1,000 kilos, doing a flying kilometre in 27 1-5 seconds, and he subsequently took the Auto-car Challenge Cup for vehicles of any power and weight, making the record time of 26 3-5 seconds.

Gabriel broke the kilometre record, doing the distance in 26 4-5 seconds, equivalent to 85 1/2 miles an hour. Gabriel's record, however, only stood five minutes, as Baron de Forest, on a 70 horsepower car, immediately broke it.

There is little new to be added regarding the cup race except in relation to the aftermath. Full returns of the race confirm the news published in the Motor World last week on the day of the race. Jenatzy won the cup for Germany. De Knyff (France) was second, Farman (France) was third, Gabriel (France), was fourth, and Edge (England) was fifth. The French team was the only one that had all its members finish. The French were second, third and fourth, and if it had been a team race, scored on points, the French would have had a sweeping victory. None of the others would have been in it because of not finishing the full team.

The showing made by America has not been improved by the later advices. This country was the only one which did not have a single representative finish. Jenatzy's victory with the Mercedes was well earned, but the glory for Germany and the Cannstadt makers is somewhat dimmed by the fact that two out of the three Mercedes broke down and Jenatzy was the only one to finish. Both the Pauhards, De Knyff's and Farman's and Gabriel's Mors went through in splendid style. Edge, with his Napier, was hours behind, but he finished the course. Exactly all that happened to the Americans will be told later in advices by mail.

The full list of accidents is: Stocks crashed into a hedge and smashed his car on the first round. Jarrott, on the second round, broke his steering gear and was thrown. Jarrott's collarbone was broken and his car was practically demolished. The axle of Foxhall Keene's Mercedes was cracked on the first round, and after travelling three rounds the control officials advised him to quit, as it was unsafe to continue, and he did so.

On the second circuit Keene lost twenty minutes replacing a tire that flew off.

Baron de Caters, who it was thought would finish fourth, broke down ten miles from the finish on the last round. A rear wheel of his machine broke. The French team won the special Scott Montagu prize offered for the team making the best showing.

The official figures of the result, as announced by the international commission on Friday, the day after the race, were as follows: Jenatzy (Germany), 6 hours and 39 minutes; De Knyff (France), 6 hours, 50 minutes and 40 seconds; Farman (France), 6 hours, 51 minutes and 44 seconds; Gabriel (France), 7 hours, 11 minutes and 33 seconds; Edge (England), 9 hours, 18 minutes and 48 seconds.

Jenatzy won therefore by a margin of 11 minutes and 40 seconds.

The French had to file a protest after the race against the winner, but it was a trivial one and the judges were not long in overruling it.

### In Desperate Straits.

Some of the makeshifts of the daily and weekly papers for "covering" the big cup race were entertaining. Not to mention the lifting bodily of dispatches to New York dailies by the weekly automobile papers that did not send a member of the staff to the race, as did the Motor World, and printing them as special cables, there were lively times in "faking" up pictures. Jenatzy was probably the contestant of whom there were fewer pictures available in this country than any of the other competitors. In fact, any picture of Jenatzy was hard to obtain.

The art manager of one staid New York daily, which is the very opposite of "yellow" in its journalism, tried everywhere to get a picture of Jenatzy and failed, and then resorted to the expedient of painting a set of pointed French whiskers on a photo of Foxhall Keene and using that as the picture of the winner. "It is something we do not believe in," he sighed, "but we must print a picture of the winner."

### A Cosmopolitan Event.

"Motoring Illustrated" says:

"The British and French teams are the only ones which are not international in themselves. That is to say, they are the only teams whose members are natives of the country they represent. Mr. Wridgway, an American reservist, is an Englishman. There is only one German among the German team, and Alex. Winton is a Scotsman who never saw American shores till he was twenty years old."

This is not all of it. The cup surely is an international trophy now. Consider this:

Jenatzy, a Belgian, operating a German car owned by an American (it was C. G. Dinsmore's car), won the French cup from England for Germany in a race in Ireland.

A London correspondent of a New York paper made it a bit worse than this when he assigned a nationality to all of the competitors excepting Jenatzy, and designated him "a cosmopolitan professional."

### Motor Races at Pittsfield.

Among the sports at Pleasure Park, in Pittsfield, Mass., on the Fourth, were races for automobiles and motorcycles. About fifteen members of the Berkshire Automobile Club were present, with visiting motorists.

The first event was a motorcycle race with three entries, the machines being run separately, against time. They finished in this order: First, S. S. Wheeler (Indian), 2:01 1/2; second, Fred Smith (Indian), 2:22, and third, Herbert Kellogg, 2:40. The distance was one mile.

Six automobiles participated in a race of one mile, each running separately against time. A new Grout steamer, owned by Dr. O. S. Roberts and run by Floyd Knight, made the best time—2:18 3-5. James Laughlin, 4th, of Pittsburg and Dalton, was a close second in a White touring car; time, 2:20. The other contestants, in order, were: C. H. Foster (Knox), 2:30 1/2; E. E. Jeffers (Grout steamer), 2:39 1-5; A. H. Kennedy (Grout steamer), 3:08 1/2, and Samuel G. Colt (Oldsmobile), 3:09.

A relay race was run with Dr. F. W. Brandon, Mr. Colt, Judge Slocum and Mr. Burbank on one side, the other team including Mr. Laughlin, Mr. Clark, of Boston, with a De Dion, and Mr. Jeffers. The first team finished in 7:29, the second making it in 7:19, winning by ten seconds.

In a slow race all the machines participated. Dr. Brandon looked to be the one who would make the best time, but he managed to make the slowest. Mr. Colt was a promising contestant up to nearly the last, when he went so slow that he stopped within a few feet of the finish, thus losing the race.

### Unique Use of an Automobile.

A unique feature in the parade of Antiques and Horribles which was one of the events in the Fourth of July celebration at Springfield, Mass., was a huge red dragon which moved along in the procession, driven by a man who was apparently mounted upon its back. The scaly monster was artistically constructed over an automobile in such a way that the chauffeur's head and body, with false arms and legs arranged to give the impression that the man was astride the monster, appeared above its back. The motion of the car caused the great jaws of the fierce-looking creature to move with weird suggestion of desire to chew up everything in the road. The effect was one which it would be impossible to secure with a float or an ordinary vehicle.

### Spanish Club's Gift to Gabriel.

Gabriel, who arrived first at Bordeaux in the unfortunate Paris-Madrid race, has been presented with a magnificent silver cup over three feet high by the Royal Automobile Club of Spain.

The car in which Jenatzy won the cup was owned by an American, Clarence Gray Dinsmore. It was borrowed for the occasion.

## BARRED FROM THE ROAD

### Bailey Law's First Victim Found—His Case May be Made a Test.

Robert E. Fulton, a member of the Automobile Club of America, and residing at No. 15 Central Park West, New York City, is the first motorist to be deprived, under operation of the Bailey law, of his right to run a motor vehicle. The law provides that a person convicted of violating any of the provisions of the statute, or any speed ordinance adopted pursuant to it, shall not only be liable to fine, imprisonment or both, but shall "be further punished for a first offence by a suspension of his rights to run an automobile for a period of not less than two weeks; for a second offence by a suspension of his said rights for a period of one month, and for a third offence by a revocation of his said right." A further provision of the law is that "a person convicted four times shall thereafter be disqualified and barred from receiving a license certificate."

Fulton was arrested in Fifth avenue on June 29 last while riding along that thoroughfare at a speed which Bicycle Policeman Van Rensselaer charged was fifteen miles an hour. With him in the automobile were two young women and a chauffeur. The case was sent to the Court of Special Sessions, where it was tried on Friday last. Presiding Justice Holbrook advised Fulton to engage a lawyer, but the young man preferred to conduct his own defence. His account of the entire affair, as given subsequently to a representative of the Motor World, follows:

"You know there is quite a grade on that part of Fifth avenue between Thirty-fourth and Thirty-eighth streets," he began, "and the road was somewhat slippery in places, too. Going up the grade I was certainly not going rapidly. That I was not making even eight miles an hour was the honest opinion of those who were with me in the car, and a matter of knowledge with me. The machine was laboring with the extra power which it was necessary to put on in order to get up the grade, and the car naturally speeded a little when I struck the down grade, as it was impossible to check it at once when the power was reduced because of slippery going."

"I must tell you, however, that earlier in the day I was on the avenue with another person, who was certainly driving his machine at a fast clip, and we were chased by this same policeman, who failed to catch us. Having recognized me on the second occasion he arrested me, as I believe, to make amends for not catching my friend and me on the earlier occasion. Be that as it may, he made the arrest, and I had to go to court."

"After the policeman had given his testimony I told the court what kind of machine it was that I was operating, and explained fully the impossibility of its going at any

such rate as was charged, seeing that I had not given it full speed. The chauffeur and one of my friends, who is experienced in automobile riding, both testified that the machine was not going at a greater speed than eight miles. Presiding Justice Holbrook consulted with Justices Meyer and Olmstead, after which he said to me: 'You are convicted, and as this is a first offence you are fined \$10, and you are also suspended in your right to operate an automobile for the period of two weeks.' My reply was, 'I think that is unjust.' 'That is the law,' said Justice Holbrook. 'What I meant,' said I, 'is that the court is treating me unjustly. We will not discuss that,' he replied, and that ended it."

Replying to an inquiry as to whether he was inclined to test his constitutional right to the use of the highway, of which he is thus deprived for a fortnight, so far as operating a motor vehicle is concerned, and of which he would be permanently deprived in case of three more convictions, Fulton said:

"I am not disposed to go to any great expense in the matter myself; and as some of my witnesses are out of town I did not care to subject them to the annoyance and inconvenience to which they would be subjected had I appealed the case. I have laid the matter before the Automobile Club, of which I am a member, and if it is thought advisable to make a test case of the matter I am willing to co-operate. If necessary, I will go out in an automobile again before the expiration of the time for which I am suspended, and will permit myself to be arrested again on a charge of unlawfully operating an automobile. The issue could be made, I presume, on my constitutional right to a proper use of the road, despite the prohibition incurred under the operation of the Bailey law. I am not aware as yet of what course the club will adopt."

A call upon Secretary Butler, of the Automobile Club, disclosed the fact that the case of Mr. Fulton is being considered by the law committee of the club, with a view to taking some action should the merits of the case justify it. W. W. Niles, the club's counsel, was visited also, but was not prepared to say what might be done, as he had not yet had any consultation with Mr. Fulton. The probability is that an effort will be made to have the case reviewed with the aim of securing a reversal of judgment, to the end that Mr. Fulton shall be relieved of the position which he occupies as having been convicted of a first offence and therefore liable to more severe punishment in the event of another conviction.

### Omaha Mayor's Ordinance.

Mayor Moores, of Omaha, Neb., has vetoed one automobile ordinance, and has stated that any ordinance must embody, in order to receive his approval, a provision requiring that every car shall bear in plain figures a number to be registered in the City Clerk's office. This regulation he regards as necessary to insure identification of automobiles in case of accident.

## ALMOST WHOLLY BAD

### Massachusetts Law About as Iniquitous as Any Yet Passed—Its Provisions.

The new Massachusetts automobile law compels all operators of automobiles and other motor vehicles to register with the Massachusetts Highway Commission. Under "motor vehicles" the law classes all vehicles propelled otherwise than by muscular power, except steam and electric cars. For the purpose of registering the law allows from now to September 1. The speed rate is ten miles in cities and fifteen miles in the country. A synopsis of the law is as follows:

"Application for registration to be made by mail or otherwise on blanks provided by the commission, requiring the name, place of residence of the applicant, with a brief description of the automobile or motorcycle, including the name of the make, the special number, character of the motor power and the amount of horsepower. Registration fee \$2. Certificate to be carried in some easily accessible place in the vehicle. On sale of the vehicle the certificate must be returned to the commission, with the notice of its sale, stating name, residence and address of purchaser."

"All manufacturers and dealers to apply for a number and a mark distinguishing their especial make of machine from all others. This to apply to all machines controlled by them, as well as to their own manufacture. Fee \$10."

"All who desire to operate machines for hire must obtain a license, and before doing so must satisfy the commission that they understand the operating of the machine and that they are proper persons to receive such certificate, which will be granted for only one year. Any non-resident of Massachusetts, if registered in another State, having his certificate with him, may operate automobiles in this State without obtaining another."

"The rate of speed is ten miles an hour in fire districts in cities and large towns or in any thickly settled part of said city or town, and in turning the corner of the road, and also in crossing intersecting roads. Outside the limits as above stated, the rate is fifteen miles an hour."

"On approaching any horse drawn vehicle reasonable precautions must be taken to prevent the frightening of the horse, and the machine must come to a full stop if signalled by the rider or driver of such horse drawn vehicle."

"All machines to be provided with suitable brakes, muffler and bell or horn, and shall display lights during the period of one hour after sunset and one hour before sunrise. Such lights shall be marked with the registered number. Every machine must be provided with suitable locks and key to prevent their being set in motion, and shall not stand in the street without being locked or made fast."

"Certificates can be suspended or revoked at any time by the commission."

"For violation of this law, and on conviction, the fine is \$25 for the first offence and not exceeding \$50 for the second and subsequent offences. Any person convicted of operation or permitting the operation of any automobile after the certificate has been suspended or revoked shall be punished by a fine not exceeding \$100 or imprisonment for ten days, or both."

## THE THOUSAND MILE TRIALS

### British Club Maps Out Its Annual Contest, Which Starts on Sept. 4.

In the forthcoming Thousand Miles Trials of the Automobile Club of Great Britain, to be conducted in September, the same system of starting from a central point and making out-and-back runs each day, which was inaugurated last year, will be adhered to. A preliminary programme has been issued by the club, from which the following particulars are gleaned:

The Trials will last from September 4 to 12, and the competing cars will start from and complete each day's run at the Crystal Palace, London. The routes agreed to are as follows:

Dates. and Routes.	Miles.
Friday, September 4—To Folkstone and back .....	139½
Saturday, September 5—To Eastbourne and back (Westerham Hill).....	120
Monday, September 7—To Worthing and back (Bury Hill).....	120
Tuesday, September 8—To Winchester and back .....	133½
Wednesday, September 9—To Southsea and back (Hindhead).....	144½
Thursday, September 10—To Bexhill and back .....	121½
Friday, September 11—To Margate and back .....	147½
Saturday, September 12—To Brighton and back (Handcross).....	87½
Total.....	1,014

There will be two sections, the first being for motor vehicles entered by manufacturers, agents or private owners, while Section II will include parts of motor vehicles, but not tires, entered by their inventors, manufacturers or agents, as showing a distinct advance on any similar apparatus previously used in an Automobile Club trial.

Section I will be divided into seven classes, according to prices, rising from a maximum in Class A of £200 to one of £900 in Class G. Gold and silver medals will be awarded as first and second prizes in each class, together with not more than three gold medals, which may be awarded to cars which have conspicuously meritorious features. The awards will be made by adding together the marks gained by each car during the trial for reliability, cleaning, replenishing, etc.; hill climbing, condition after trial, brakes, steering, absence of noise, absence of vibration, absence of vapor or smoke, absence of dust raising, speed on track, restarting on hill, finish and appearance, general cleanliness of motor and gear, fuel consumption, accuracy of horsepower and cheapness.

The number of cars of any particular type and horsepower entered by a manufacturer or agent is limited to one; racing cars, however, will not be admitted.

A motor 'bus has been given a trial in Montenegro, covering in two hours a route which horses took six hours to cover.

### Incubating an Auto Ordinance.

The Milwaukee City Council is still engaged in the incubation of an automobile ordinance, and the local automobilists are watching the process with more than passive interest. They have appeared before the Judiciary Committee and have succeeded in having that body lay the matter over until next week, in order that copies of ordinances adopted in other cities may be obtained. In the mean time the Automobile Club will draw up an ordinance embodying the views of its members, which will be submitted to the committee. In his protest against the adoption of an ordinance providing for licenses and numbers, Dr. E. W. Bartlett said that numbering the machines would amount to putting owners and drivers of automobiles in a class heralded thus as quasi criminals, who must be tagged and watched. He added:

"The automobile is safer than most horses, and there are less accidents with the machine than with horses. I have horses, on which I pay taxes at a heavy valuation, and also own a machine. I like my horse and value and appreciate him; therefore my view is an impartial one. There is neither reason nor necessity for the license fee, or the penal provision that machines shall be numbered."

Father J. F. Szukalski, pastor of St. Cyril Methody Church, who owns an auto car, was another pronounced opponent. He asked the committee to await a decision of the United States Supreme Court on a question involving the right of a council to levy a license fee on machines, where none is levied against horses and carriages.

### He Warned Motorists of Trap.

It is hard to say where the judicial persecution of automobilists will stop. At Newton, Mass., last week, where the crusade against motorists has been resumed, G. W. Crawley, age twenty-seven, was arraigned on the charge of interfering with the police. It is alleged that Crawley warned four automobilists on Commonwealth avenue that the police were waiting for them for the purpose of arresting them on the charge of racing their machines. Judge Kennedy continued the case.

### Autos for Street Car Work.

C. A. Singer, of the New York & Stamford Street Railroad Co., Stamford, Conn., is a firm believer in the value of the motor vehicle. He has ordered a six seated machine for the use of the directors of the road, and a runabout for short, quick work. He expects that it will be capable of making better than forty-five miles an hour, and hold six persons readily. He says: "I have used an automobile to such good advantage in railroad work that I have decided to have three machines."

### On the Island of Elagin.

Motor car and motor cycle races were held on June 8 on the Island of Elagin, near St. Petersburg. They were organized on behalf of public charities.

## JEROME AVENUE'S CONDITION

### A. C. A. Raps President Haffen Unnecessarily— Money Voted for its Amelioration.

At the Monday meeting of the governors of the Automobile Club of America indignation was expressed because no attention has been paid by Borough President Haffen of The Bronx to the petition asking him to remedy the disgraceful condition of Jerome avenue, New York, and it was decided to appeal directly to Mayor Low in the matter. The resolution adopted was as follows:

"Whereas, The Automobile Club of America presented some months ago to Louis F. Haffen, President of the Borough of The Bronx, a petition relative to the putting of Jerome avenue into proper condition by removing the large number of unnecessary crosswalks and resurfacing the roadway; and,

"Whereas, Since the presentation of this petition nothing has been done in the matter and this highway in its present condition is a disgrace to the city of New York; therefore,

"Resolved, That we inquire of President Haffen why no action has been taken, and if he is unable to procure the necessary money to properly repair this road we deem it our duty to call upon the Mayor of New York to ascertain the best means of securing an appropriation for this purpose."

At the same session of the governors Messrs. L. A. Ripley, Alan W. Wood, George Crocker, Victor L. Mason, John T. Rainier, N. M. Flower, Robert B. Kerr and Robert E. Fulton were elected members of the club.

On Wednesday it became evident that the governors were hasty in condemning President Haffen, for on that day the Board of Estimate allowed Mr. Haffen an appropriation of \$280,000 for repairing Jerome avenue. Mr. Haffen estimated this amount as the cost of the work and had asked for it on Thursday of last week.

On Friday of last week the Board of Estimate and Apportionment granted the \$280,000 appropriation asked for by President Haffen.

### Aurora Motorists Organize.

An automobile club has been formed at Aurora, Ill., with a temporary organization consisting of Dr. Courtney L. Smith, president, and S. W. Thorne, secretary. About twenty automobilists were present at the initial meeting. The City Attorney, acting under instructions from the council, is drawing up an ordinance to regulate the driving of automobiles, but the chauffeurs have no objection to any of its proposed features.

### Drove Into an Open Bridge.

Suit has been brought against Grant County, Ohio, by Drs. Tuttle and Morgan, of Van Wert. The two physicians went into an open bridge in an automobile. There was no light to show the danger ahead, and the physicians were seriously injured.

## RECEIVERSHIP PRECEDENCE

### Supreme Court Gives it to the Federal Appointee—Lawyer's Compensation.

Washington, D. C., June 30.—Two decisions of far reaching importance affecting many bankruptcy cases have recently been handed down by the United States Supreme Court. In the first case two attorneys acted as counsel to a manufacturing firm against which a petition in bankruptcy was filed under the State laws. A receiver was appointed by the State court, but later on certain other creditors filed a petition in the Federal court, which also appointed a receiver. The State receiver had made certain contracts on behalf of the bankrupt firm for the protection of the creditors, and sought to obtain possession of the property, but the Federal judge declined to permit him to do so, notwithstanding which he seized all the assets. The Federal receiver thereupon demanded and took over the property from the State receiver, upon which the State court dismissed the receiver for his negligence and appointed a new receiver, who in turn took the property from the Federal receiver. As the result of these proceedings the attorneys who acted for both bankrupt and State receiver were held in contempt by both the State and Federal courts, and were committed to jail for sixty days by the latter court.

In handing down its decision in this case the Supreme Court held that the authority of the Federal receiver was superior to that of the State receiver, and that the former was entitled to take over the property. It further found, however, that the petitioners were not guilty of contempt of either the State or the Federal court, as the evidence shows that the advice given by them was in good faith and solely for the protection of their clients' interests. It was pointed out by the Supreme Court that in similar cases hereafter the proper procedure will be for the receiver appointed by the Federal court to become a party to the insolvency proceedings in the State court, by means of which proceedings he may possess himself of the bankrupt's estate, in conformity with the provisions of the Federal bankruptcy law. This decision is regarded as of great importance, as it sets at rest all questions of conflict between the Federal and State courts relating to bankruptcy cases.

In the second case the chief question was the extent to which an assignee may be reimbursed for expenses incurred by him in resisting bankruptcy proceedings under the Federal law, and on this point the court holds that such expenses cannot be paid. In the case at issue the appellants filed a claim against a bankrupt estate for professional services rendered the bankrupt in preparing a general assignment; for general advice and counsel to the assignee; for services in defence of a suit brought under the State laws,

and for services in resisting an adjudication of bankruptcy under the Federal law. In rendering its opinion the Supreme Court said:

"We are not disposed to go further than to allow compensation for services which were beneficial to the estate. Beyond that point we must throw the risk of his conduct upon the assignee, as he was chargeable with knowledge of what might happen. . . . None of the claims is entitled to preference under the deed of assignment. The charge for the preparation of the assignment properly may be proved as an unpreferred debt of the bankrupt. The services to the voluntary assignee may be allowed so far as they benefited the estate, and, inasmuch as he would have been allowed a lien on the property if he had paid the sum allowed, the appellants may stand in his shoes and may be preferred to that extent. No ground appears for allowing the item for services in resisting an adjudication of bankruptcy."

Under this decision bankrupts and their assignees under the State laws will be unable to pay for legal assistance out of the proceeds of the estate subsequently adjudicated in the Federal courts, unless such assistance has clearly been beneficial to the estate, and in no case can allowance be made for expenses incurred in resisting bankruptcy proceedings brought under the Federal law.

### Winton and Baker Donate.

The new automobile department which the Case School of Applied Science will establish this fall, as stated in the Motor World, will be well equipped. The Winton Motor Carriage Co. and the Baker Motor Vehicle Co. will each give the school the complete machinery part of one of their automobiles for study. Equipment from several other of the leading automobile companies will also be obtained for the purpose of study. The automobile laboratory will be located in the new steam engineering laboratory building, which will be constructed this summer.

### Picture Tells the Story.

The feature in an attractive hanger put out by the Locomobile Co. of America, Bridgeport, Conn, is a representation in colors and bronze of a 16 horsepower Locomobile touring car, fitted with King of the Belgians aluminum body. The picture is so suggestive of speed, with comfort, that the hanger bears but a few words of letter press—just enough to enable the picture to tell its own story.

### Rockford's Auto Population.

There are nearly twoscore automobiles in use in Rockford, Ill., and the number is being steadily added to. The town is proud of its many women motorists, nearly a third of the cars there being operated by them. The Baker car has a lead over all others, with the Oldsmobile a good second.

Among the recent purchasers of Peerless cars was Oakes Ames, the well known Boston financial magnate.

## FORTUNE AWAITS HIM

### The Man who Produces a Perfect System of Springing for Motor Cars.

"There is a small sized fortune awaiting the man who brings out a decent automobile spring," declared a man in the trade who knows what he is talking about.

Of course, the Motor World man was all attention and gave the speaker the encouragement to go on that he was looking for.

"Not a car on the market is properly sprung," he went on vehemently. "I do not except any car, whether made here or abroad. There are some springs that are better than others, of course, but that is principally because the 'others' are so blamed bad. You show me a car that is comfortably sprung and I will show you one that is troubled with broken springs—and plenty of them. Conversely, show me a car with springs that stand up and I will show you one that rides like an old springless farm wagon.

"Not that the makers of cars are altogether to blame, for they are not. They have a mighty hard job to tackle when they come to springs. Now, don't ring in the carriage makers, for that's a very different proposition. I'll admit that they do understand the art of springing and produce vehicles that are positively luxurious. But, then, they have the benefit of many centuries of experience and their problem is a simple one compared with that of the automobile makers. The former take a running gear, put shafts on it and springs to support a light body and two or four people. The horse or horses draw the vehicle without putting any strain on the springs, and all the latter have to do is to act as a buffer between the wheels and the body. Could anything be easier?

"But take an automobile and think what you have to do. You have got ten or fifteen times the weight in your vehicle, in the first place, and you run it three or four times as fast. Then you must put a considerable part of this weight—your engine, or your engine and boiler if it is a steamer—where it is trying to hammer the springs, the running gear and the whole shooting match to pieces. Is it any wonder that the ordinary springs, such as they make for carriages, only heavier, are no good?

"All the same, however, springs have got to be improved. People will get tired of being jolted around like jumping jacks. This may be good for the liver, but people think of something besides their liver when they go automobiling. You mark my words: The maker who first fits good springs is going to get there with both feet."

William Reid has joined forces with H. Althoff, of Aurora, Ill., and formed the firm of Althoff & Reid. They will deal in and repair automobiles, bicycles, etc.



## EDUCATION OF A SALESMAN

### Six Weeks of Study in Factory and Store Fitted Him to Sell Autos.

"Great game this automobile business, isn't it? But it's hardly in its infancy yet. Some day it will overshadow all except a few of the biggest industries in the world. It was the belief in such a future that caused me to go into it."

The speaker was a man who had filled responsible positions in another line of business, and who was noted for his ability to sell goods to a customer whether he was ready to buy or not. The Motor World man encountered him accidentally, and, knowing the facts of the case, sought to draw him out.

"How did I manage to break into the game? Well, I'll tell you, and then you will see that it isn't as easy to break into it right as it is to scramble into it anyhow."

"When I first made up my mind to enter the field I determined to do it right. So I looked around for a concern that wanted the services of a good man who knew absolutely nothing about an automobile, but could learn. As you may imagine, such a concern was not easy to find, and I looked quite a while before I found one to my mind. But I persevered and at length made my connection. It was made a part of my contract that I should spend six weeks studying the situation before being called on to do a stroke of actual work in selling goods. That was a pretty good educational campaign for them to foot the bills for, but I honestly believe that it was worth every cent of it, and, what is a great deal more, that my employers are convinced that it paid them."

"What did I do during these six weeks? I put myself down to make a thorough study of the automobile, to master its construction from top to bottom, to learn its peculiarities and idiosyncracies. I began by taking a ride in one—a pretty good start to make, wasn't it? An experienced man drove, of course, and I watched him pretty carefully. Finally, after we had started back to the store, he let me operate it. I made out fairly well. Two or three narrow escapes from colliding with other vehicles gave me heart trouble, but the regular operator was there to catch the lever and take charge of things."

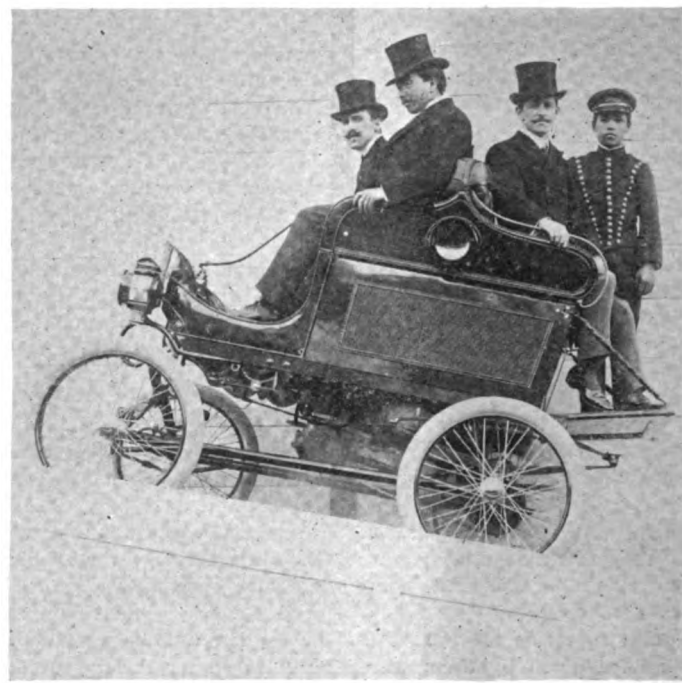
"A couple of days spent in this way brought me to the point where I could handle a car on a clear road. Between times I nosed around in the repair shop, watched the men work around, uncrate and put together some new cars that came in, and in general made myself a sort of walking information bureau. By that time I was ready for the real, serious part of my education. That was to be obtained at the factories."

"First I went to one of the big ones, whose

agents my people were. I spent a week there, studying the various processes of manufacture. It wasn't enough for me to know that a certain part was made in a certain way and of a certain material; it was part of my task to ask why, and before I got through I was nicknamed "Why" by the entire force. Even the boys who "tidled up" the floors would grin at me and salute me as "Mr. Why," at first timorously, and then, as they saw I stood for it all right, openly. But I did not mind it a bit. I was green enough, Heaven knows, and there wasn't any use trying to pretend the con-

the trouble was as quickly as the operator in charge of the car.

"Three other factories were visited in turn, and in each of them the same methods were pursued. That done I went back to the store and started out with a car, with a man along in case of accident. I got along finely. Had little trouble in operating the car, and was only sorry that nothing went wrong with it, as in that case I could have put my new-found knowledge to use. But I knocked around for another week, running cars on the road and spending part of the time in the shop and in the salesroom."



A COSMOPOLITAN GROUP IN AN AMERICAN STEAM CAR IN JAPAN.

trary. Besides, I was learning fast, and was too much interested in the intricacies of motor vehicle construction to pay much attention to anything else.

"Not all my time was spent in the factory, however. I spent considerable time on the cars that were being tested, accompanying their operators on their runs. In this way I learned to know the things that were most likely to go wrong, as well as why they did so, and how they were put to rights, either temporarily or permanently. I learned to train my ear so I could tell how the car was running. If the engine began skipping the sound told me of it, without my having to wait until the speed slowed. A slipping clutch, a sooted spark plug, a loss in compression—all these things became familiar, and I got so I could sometimes tell where

and then I was ready to start in for keeps."

"It never was much trouble for me to talk to a customer, and now that I was cocked and primed I sailed right in. I was able not only to explain the details of construction, but to point out wherein they were superior to methods used on other cars. If, as was usually the case, a demonstration was asked for, I could take the car out and put it through its paces. And in the rare event of anything going wrong I was able to locate the trouble and remedy it, sometimes under the guise of explaining the working of some part."

"Since then I have learned a lot more about automobiles, but that six weeks of practical work did more for me than six months of work in the store would have done. It was time well spent, and if there was more of it done there would be fewer half-baked salesmen found in the various stores."

## AN INTERNATIONAL ALLIANCE

**American-British Firm in Japan Makes Brave Showing at the Osaka Exhibition.**

One of the most progressive concerns in far-off Japan is the firm of Andrews & George, Yokohama. A short time ago they opened an automobile department, which they will conduct in conjunction with their bicycle business, the latter being one of the largest in Japan. The makeup of the firm and its location fit in a most happy fashion,

ing is an imposing one the illustration makes plain, and this will be further demonstrated when it is stated that it exceeds in size the entire structure erected for the Canadian Government.

### Worcester Club to Banquet.

The Worcester, Mass., Automobile Club will hold a banquet on July 16. All Worcester owners of automobiles will be invited, and the banquet is expected to awaken the club, which has not been very active this year. Several prominent out-of-town automobilists, including some from Providence,

## TRANSCONTINENTAL MOTORIST

**San Francisco Tourists Started Monday for New York in an Oldsmobile.**

Headed for New York, F. M. Williams, of Pasadena, Cal., left San Francisco on Monday, bent on traversing the continent in an automobile. He has been planning the trip for some little time, and though the journey is an arduous one, with almost insurmountable difficulties to be overcome, he is confident of winning his way.



ANDREWS & GEORGE'S BUILDING AT THE NATIONAL INDUSTRIAL EXHIBITION, OSAKA, JAPAN.

international amenities being considered, one member being an American, the other an Englishman. Naturally, their reception in Japan, the traditional friend of America and England, was cordial in the extreme. They handle American and British goods on an extensive scale, being agents for several of the leading American makers.

In connection with the National Industrial Exhibition, which opened at Osaka on March 1, Andrews & George made preparations to be fittingly represented. Last year they secured land on one of the main avenues of the exposition grounds and erected a building thereon. In this building, which is shown herewith, they display the goods for which they are agents. That the build-

are expected to attend, and a number of important matters to automobilists will be discussed at that time. Harry Fosdick, the well known Boston automobilist, who made a trip through Europe last year, will attend, and be one of the after dinner speakers. W. P. Woolson, secretary of the Vermont Automobile Club, is also expected. At the banquet it will be decided whether the club will have permanent headquarters in Worcester.

### Growth of the A. C. F.

The Automobile Club de France, which numbers more than 2,000 members, finding it necessary to increase its accommodation, has bought the adjoining house on the Place de la Concorde.

An Oldsmobile is the car in which Mr. Whitman and his companion, E. J. Hammond, also of Pasadena, are making their trip. The car was shipped from the Olds Motor Works for them about a couple of weeks ago. They carry a message from Mayor Schmidt of San Francisco to Mayor Low of New York, and expect to deliver it in person on their arrival, sixty days hence.

### Oldsmobiles at Osaka.

Among the exhibitors of American goods at the National Industrial Exhibition at Osaka, the second city of Japan, is the firm of Bruhl Freres, of Kobe and Yokohama. They show a selection of Oldsmobiles, for which they are agents.

## IN A TOURING CAR

### Enthusiasm Created by a Day's Jaunt in the Latest White Production.

Any motorist or other person imbued with the belief that the steam automobile is decadent is recommended to try a ride in a White touring car, as did a Motor World representative a short time ago. The "fourth power," as the White steam system has been aptly termed, was a marked success in the phaeton type of vehicle which was so familiar last year; in this season's touring car it is a revelation, capable of rousing the most blasé motorist to enthusiasm.

With a car of this type and such a past master in the art of automobile management as Paul H. Deming to drive it, anything but an enjoyable trip was scarcely conceivable. The route taken was the familiar and much travelled one through New Rochelle, Larchmont, Mamaroneck, Greenwich, etc., so charming in its diversified character, with its rolling and, in the man, well kept roads and its glimpses of pretty suburbs and handsome residences. The dust—that bugbear of midsummer riding—had been laid by recent rains. There was nothing lacking, therefore, to make up the ideal.

The peace and quiet that accompany a White car are doubly grateful when all around the rattle of firecrackers and the din of multifarious other noises is heard. A slight push of the throttle and the car responds, not with a jerk and a roar, but with an easy, gliding motion that suggests feather beds and air cushions. A little further opening of the throttle and the car's speed is accelerated until it moves along at almost the legal rate of speed. The design of the car, its low centre of gravity, long wheelbase and excellent springing, make for luxury, and the unevenness of the roadbed produces scarcely a jar.

The perfect control possessed by the driver is another impressive feature. The reserve steam capacity of the White generator is equal to all demands made on it. The longest and steepest hills are surmounted without loss of speed or slackening to wait for more steam. To slow or start up again, anywhere is the easiest thing possible, and the way the car responds is wholly admirable.

After proceeding to within a short distance of Bridgeport a right-about-face was executed and the car headed for New York. Luncheon at Hunter's Island and a stop at Woodmansten Inn brought the run to a conclusion.

Vancouver, B. C., has a new automobile in town, and Vancouverites now feel up to date. The local paper says: "Toot, toot! Look out for the red demon!" and so on. It is a Rambler touring car, imported by the Canada Cycle and Motor Co.

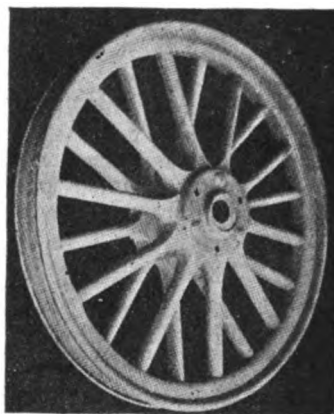
## No Rule of the Road.

A Milwaukee tradesman declares that in that city the rule of the road is habitually disregarded.

"There are no rules observed at all," he says. "I am surprised that there are not more serious accidents. The viaduct is one of the worst places. The teamsters there drive in the middle of the road and a man coming along in an automobile is unable to observe one of the oldest rules, that of turning to the left on approaching a team from the rear. The animosity of the teamsters toward the automobiles will not make things any pleasanter for either party."

## A Double Artillery Wheel.

An entirely new design of artillery wheel has been brought out by a British concern. It is really a double wheel. The hub, which is of the usual type, is provided with two flanges, from which the spokes converge to one felloe. It is claimed that the wheel will



withstand all side strains by slip or twist when negotiating corners. Of course, the great point in the wheel is its strength, and, owing to its construction, it can be made quite as light, if not lighter, than the ordinary wheel, while the makers claim that it is three times as strong.

## Express Co. Buys Electrics.

Thirteen electric delivery wagons reached Buffalo last week, to be used by the Adams Express Company in that city. No horse-drawn vehicles whatever will be used.

At Rochester, too, the company has installed five self-propelling delivery wagons. They are large vans, with batteries capable of propelling the vehicles forty-five miles on one charge. A parade of the vans attracted much attention, although there are perhaps a thousand automobiles in Rochester.

## E. V. Co.'s Busy Day.

Thursday of last week was a red letter day for the Electric Vehicle Co.'s New York branch. No less than \$60,000 worth of vehicles were sold. The largest order booked was from R. H. Macy & Co. for fifteen of the company's latest model delivery wagons. Other vehicles sold included a Columbia gasoline touring car, a rear driven electric coupe and several victorias.

## STRIKE HELPS MOTORS

### Horseless Vehicles Pressed Into Service at Melbourne when Railways Stop Running.

Melbourne, May 25.—Automobilism received a lift by the great railway strike. The daily papers, unable to circulate their sheets in the country districts through the very meagre initial "strike" service, engaged or bought the best cars available. These motors had to make runs up to 100 miles from the metropolis, and smart work was recorded, the best being that of the motor which covered the century by 9:40 a. m., with that day's paper aboard. Yet our daily papers have up till now given motoring almost a bad time, nothing, or at least very little, appearing in their columns of interest to motorists or prospective purchasers of their vehicles. It really is a bit of irony that they were the first to make practical use of the new locomotive. In any case, this may do motoring some little good, and will serve to show these much too conservative journals that automobilism cannot be ignored for long. It is a wonder to many that the motor has not caught on here. The motorcycle, however, is making better headway. It is considered that the high cost of landing a car here (about 50 per cent of the invoice price, duty included) deters many from investing in one. We have also had some bad advertisements from the behavior of the most of those imported, and people look at \$1,000 or more before they part with it for one of these vehicles, which, so far, have not proved reliable in every way.

## Tangle in Jersey Licenses.

Carelessness on the part of New Yorkers in preparing their applications for New Jersey licenses is making them a lot of trouble, and over the Fourth of July holiday especially there was a lively mixup between men desirous of going on excursions into Jersey and the officials at Trenton.

The whole trouble comes through automobilists neglecting a caution repeatedly given by the Motor World, and making the affidavits that have to go with their application for a license before a notary who is registered with the Secretary of State in New Jersey. There are plenty of such notaries in New York City, and this is the most direct and simple way of fulfilling the requirements. If the affidavit is made before a New York notary it is necessary, in addition, to get a certification from the County Clerk as to the standing of the notary before whom the declaration of ownership and ability is made.

On the third of July the license clerk in the Secretary of State's office at Trenton was deluged with telegrams from would-be licensees whose papers, defective in many ways, had been sent back for correction. So persistent were some of them to be allowed permission to journey to Asbury Park, Ocean Grove and Atlantic City, and pledging themselves to forward the correct affidavits, that the clerk carried the matter to the Secretary of State, who directed answer to be made that he could not suspend the law.

## AWARDS FOR MUFFLERS

### French Club Holds Trials and Pays Cash for the Best Devices Submitted.

Recent trials of mufflers, conducted at the laboratory of the Automobile Club of France, only served to emphasize the fact that these indispensable articles are still capable of much improvement. A muffler that really muffles, and yet does not cause too much loss of power by back pressure, is yet to be found, and not even the cash prizes offered by the club availed to bring out a device of this sort.

The report of the trials, submitted by M. Forestier, states that, in considering the merits of the different apparatus submitted, the judges took into account not only the diminution of the noise, but also the resistance offered to the passage of the exhaust, the space occupied, weight, smell, discharge of smoke or vapor, simplicity and economy of construction.

All the mufflers were tried with a single-cylinder horizontal Gillet-Forest engine with 140 mm. bore and 16 mm. stroke, and developing 7.7 h. p. at 900 revolutions a minute. The power absorbed was measured electrically. Of the sixteen silencers entered, two were not presented, and one arrived too late to be officially classified. The results of the trials were as follows:

	Weight in kilograms.	H. P.	Loss of h. p.
Ossant Frères.....	10	6.84	11.1 per cent
De Retz.....	19.05	6.72	12.2 per cent
Moto-Car.....	7.35	6.11	20.6 per cent
Ossant Frères.....	10.7	6.84	11.1 per cent

The judges express their regret that none of the silencers fulfilled the very necessary condition of suppressing noise without absorbing too much power. Those competitors who tried to break away from the conventional form of silencer, with more or less complicated systems of internal flanges and the like, have not altogether succeeded, though they are to be commended for their ingenuity and initiative. Thus Chapuy et Cie entirely suppressed the noise by passing the exhaust gases through a porous substance; but the back pressure is so great that a considerable power is lost. M. Arnaud receives a special mention for his apparatus, which is compact, simple, easily detachable and only absorbs a low percentage of power, but it is too noisy, partly, no doubt, because it is made of bronze, which gives it a metallic sound. M. Maleville has adopted the ingenious idea of drawing air through the silencer to cool the burnt gases before they escape; but the difficulty lies in securing a sufficient admission of air, and though the noise was certainly diminished the apparatus was not altogether satisfactory.

Most of the others were of the conventional type, with internal devices for expanding the exhaust; but they all had the disadvantage of increasing the absorption of power with a diminution of noise. In the Moto-Car silencer the noise is suppressed by

passing the exhaust through iron filings. It is very efficient in this respect, but it absorbs 20 per cent of power and, moreover, the iron filings have a tendency to be blown out. The judges awarded 600 francs to Ossant Frères for their two apparatus, which appeared to be the most silent, though, unfortunately, they absorbed 11 per cent of engine power. M. De Retz was awarded 100 francs for his appliance, which offers a little less back pressure, but it is not quite so silent; and similar awards were made to M. Arnaud and MM. Linzeler et Cie. The silencer of M. Mégevet received a mention, as the judges considered that the noise, which prevented its taking a higher rank, was due largely to the sonorous metal of which it was made.

### A New Dow Coil.

Anything bearing the name of Dow is universally recognized as reaching the very highest type of excellence. Long experience in the manufacture of standard electrical goods has well fitted the Dow Portable Electric Co., Braintree, Mass., for the work of producing reliable automobile parts, and



their success in this field is too well known to need more than mention. The new Dow induction coil, shown herewith, embodies the same high condition of excellence that has marked previous ones. Especial attention has been given to such important matters as the composition of the core, the winding of both the primary and secondary circuit, etc. The result is a coil which the Dow company confidently recommend as being efficient and reliable in the highest degree.

### "Made in France."

Folks who are sticklers about having imported accessories only on their motor cars and go in strong for everything foreign, in the belief that the best is made abroad, would be interested in the proceedings in a plant visited by a Motor World man the other day. Spark coils were being turned out by the scores and hundreds, and they were all "genuine French coils," design, labels and all, just as they are seen on the big imported cars of the men who go in for everything foreign. This factory, not far from the New York City Hall, supplies a large part of the demand for "genuine French coils," and those who use them say they work much better than the "American made" coils.

## PACKARD POLICY OUTLINED

### Denies Report That it Will Put Out a \$2500 Four-cylinder Car in 1904.

A report which appeared several weeks ago, stating that it was the intention of the Packard Motor Car Co. of Warren, Ohio, to manufacture a four cylinder vertical motor car, listing at \$2,500, and of which, the report went on to say, they intended to build one thousand next year, is vigorously and explicitly denied by the officers of the company, who state in part:

"It is not the desire of the Packard Motor Car Co. to hold over the heads of the trade an 'Edison Storage Battery Situation' in the slightest degree. There is no earthly basis or warrant for such statement, and, furthermore, the four cylinder vertical motor which we will make is \$7,500 and the highest priced American car on the market. Our company under no circumstances would abandon the manufacture of our present model F, single cylinder touring car, which has made for us so many strong friends.

"The Packard Company will continue to make its present line of cars the best it knows how, and it has no intention of putting out a large quantity of cheaply constructed material in the form of motor cars, and will never do so so long as it is owned by the present stockholders."

The statement seemed improbable on its face, but the source of the report lent color to the story, which, as the above shows, had no foundation in fact.

### Which Way His Money Went.

It was a wise retort that a friend made to the manager of a New York City branch establishment when they were out together for a ride on the Fourth of July. They were tooling along in the upper part of the city where the streets are all torn up for building the new subway. They came to a place where the car tracks run along on joists which support them from the bottom of the tunnel, and it is a sheer drop of fifty feet on each side of the tracks to the bottom of the pit. Said the manager to his friend:

"I'll bet you ten dollars I can run the car along on those tracks all the way as far as the tunnel goes."

The friend rejoined:

"You win. I'll give you ten dollars not to try it."

### Rain's Depressing Effect.

The effect of the rainy weather upon the sales of cars in New-York City has been decidedly severe. Everywhere in the trade there is complaint about the falling off of sales. One concern that sells steadily ten or twelve runabouts a week, had its sales drop to one-third of the usual number under the influence of continued wet weather.

## IS GYROSCOPIC ACTION

### That Affects the Steering of Cars at High Speed on Turns.

When travelling on a high power motor car, if the driver incautiously take a bend of the road at too great a speed the car is overturned or the wheels collapse under the tremendous strain, or (in the case of a racing car having a low centre of gravity) the car is forced violently outward against any obstacle, in spite of the efforts of the driver to keep an inside course, the result being a bad smash, says a correspondent of the Car.

What I wish to call particular attention to is that such occurrences are generally supposed to be caused by the centrifugal force which is created by taking the curve at too high a speed. I admit that to a great extent this is so; but the following experiment will prove that the gyroscopic action set up in the road wheels and in the engine flywheels must seriously affect the steering of fast cars.

Take a spare wheel, preferably a light motor car wheel, and having grasped the axle firmly with both hands, get a friend to spin the wheel as rapidly as possible by striking the spokes; or, should an engine be available, place the tire against the flywheel, and when the motor car wheel is revolving at a high speed it will be noticed, firstly, that the wheel can be moved easily in a straight line, as if fixed to a motor car travelling on a straight course; secondly, bodily translation of the axis parallel to itself produces no gyroscopic effect, but any other movement is powerfully resisted (other than in its plane of revolution). This resistance increases in proportion to the speed, diameter of wheels, rate of revolution and sharpness of curvature. The numerical value of these gyroscopic effects under such varying conditions could only be ascertained by experiment; and even then allowance would have to be made for centrifugal force and non-synchronous action of the engine, which sometimes occurs at certain critical speeds. I mentioned this matter to an engineer who is credited with being an expert in mathematical analysis, and his remarks showed how little this subject is understood. He said: "In the case of a motor vehicle turning a corner, the steering wheels have already been diverted from their original plane of motion before this gyroscopic action takes place. Let me point out that it is the very act of diverting the wheels from the original plane of motion which produces the action to which I refer.

"In turning a corner the gyratory action generated in the four road wheels and in the flywheel of the engine has to be counteracted, thus putting a strain upon the road wheels and the steering gear quite separate and distinct from, and additional to, those effects caused by centrifugal force.

"One remarkable peculiarity of this gyroscopic action is that it has no tendency to upset the car, as is the case when centrifugal force comes into action from excessive speed round a sharp curve, or from bad steering. On the other hand, it tends to keep the car, as one might say, straight on the road. An excellent example of this action is seen in the Whitehead torpedo, which is fitted with a gyroscope to compel the vessel to continue in a straight course through the water.

"An express train, travelling at a high speed, has the same tendency to continue running in a straight line; but it has this advantage over a motor steered by hand—that it is compelled to follow any curve because it is guided by the rails; but even with this additional security engine drivers know there is danger of derailing, and generally slow down when nearing a curve.

"The flywheel of the petrol motor being usually heavier than the road wheels, and the speed very great, this gyratory force is much more evident in the flywheel and other revolving parts of the engine than it is in the road wheels. It is the position of the engine on the car to which I attribute this gyratory disturbing effect upon the steering.

"Speaking purely from a racing point of view, I would suggest that the engine be placed (for experiment) in the centre of the car, where there is the least turning movement, with the cylinder fixed horizontally and the axle vertically, which would allow the car to turn in any direction without altering the plane of revolution in the flywheel. The diameter of the road wheels is an important matter, because increasing the diameter of the wheels unnecessarily exaggerates the defects which I have pointed out. I admit that any radical alteration in the position of the engine, etc., presents serious difficulty; but I am of opinion that some alteration is urgently needed to insure the safety of fast motor cars. Any structural alterations which will reduce this tendency would at the same time greatly increase the durability of motor cars, especially in regard to the tires."

### In Minneapolis Parks.

Regulations governing the use of automobiles in the parks and parkways of Minneapolis, Minn., adopted on Saturday last, provide that the cars must be kept in the carriage driveways, the speed being limited to fifteen miles an hour, with a reduction to four at crossings. Lamps must be carried after dark, and gasoline engines must be muffled. A fine of \$100 or imprisonment in the workhouse for ninety days is the maximum penalty.

### Speeding on Old York Road.

Director of Public Safety Smyth of Philadelphia has cast an official eye on the Old York Road, where automobilists, so 'tis said, are wont to hit it up to the tune of twenty-five miles an hour. Director of Safety Smyth has given orders to stop it.

## OLDFIELD A SAMARITAN

### He Meets a Motorist in Distress and Puts his Car to Rights.

In addition to being a fearless and skilful driver, "Barney" Oldfield has a tender place in his heart for unfortunate motorists. A story told of him while at Indianapolis a short time ago illustrates this.

A local motorist, whose car had gone wrong, dismounted and began to repair the machine. He was handicapped by the fact that he had left his tools at home.

To add to his general joy a drizzling rain began to fall. Several downtown dealers and local chauffeurs rode by, and, noticing the predicament of the driver, gave him the merry ha! ha! In vain the struggling chauffeur tried to flag a passerby, but they all gave him that chilly Klondike stare which caused his very blood to run cold as he thought of the social engagement he was missing, all because his tools were in the city and he was five miles out.

Then something happened. So many drivers had passed him by that he did not notice for a moment the man who had drawn up beside him.

"What's the trouble, old man?" cried a cheery voice, and the passing motorist crawled out of his car and began to investigate.

"Nothing the matter here," he continued. "Just a little wire broken, and we can repair it in fifteen minutes."

Then this modern Samaritan began operations in the twentieth century way. He produced a kit of tools, hauled off his coat and was soon on his back under the vehicle, working as though the breaking of a world's record depended upon his getting a fellow sufferer's wagon in running order.

Seeing the Good Samaritan hard at work, out of mere curiosity other drivers began to pause and offer a helping hand. Their overtures were refused, and within fifteen minutes both machines were on their way back to town.

And the next day the helped one went to the races, and was very much astonished when he discovered that the Good Samaritan was no other than Oldfield.

### Now It Is Tobacco.

Paris, June 27.—Automobiles are now being used by smugglers to cross the Belgian frontier, where tobacco is the chief article smuggled. An automobile covered with a cloth for a disguise rushed through so fast that it was impossible to arrest it or to telegraph a description for arrest further on. The customs officials are planning some cable arrangement to stretch across the roads to stop such smugglers. This has all the earmarks of that class of paragraphs which editors mark: "Always good; use any time."



## HIS VALVE STUCK

And he Could not at First Locate the Trouble  
—Discovered by Accident.

"There doesn't seem to be any end to the things you can discover about a motor vehicle," remarked a rider whose experience extended over a number of months. "You may think you have had everything in the machine's catalogue of sins happen, but the time always comes when you find you are mistaken.

"Starting out for a ride a short time ago, I fancied there was loss of power. A few miles on, when I stuck in the middle of a hill, I was certain of it. Yet only the day before matters had been perfect.

"With so many places to look to, it is not wonderful that we often follow a wrong track. It seemed easy to locate this trouble, until I had tried several promising places, without results.

"At last I touched the inlet valve—a second time—but again discovered nothing wrong. For experiment's sake I replaced it with a spare one. Then she went perfectly. Puzzled, I put back the old one. Then she pulled up and stood still as before in the middle of a hill.

"Taking out the valve and examining it more carefully, I discovered the very slightest stickiness—you could not say it stuck—caused, I will not say by overlubrication on the previous journey, but by the inherent evil due to lubrication. Oil had been thrown on to the valve, which, so long as it was hot gave no trouble, but as the parts cooled a partial baking of this sooty oil took place, and the resulting crust checked the valve from parting instantaneously enough from its seat. Simple! Isn't it? But how these simple defects hang us up on a journey! But for the spare valve I should not have located the fault, and here let me say, in a word, go to sea without a life buoy if you like, but don't go motoring without extra parts."

## Gurney and his Tribulations.

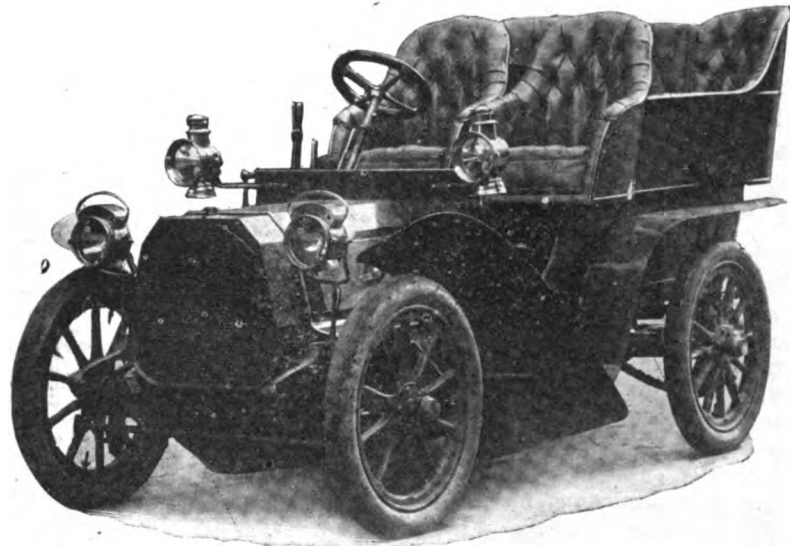
In these days of high speeds it is interesting to recall that it was in July, 1829, some little time before George Stephenson had solved the problem of steam transport, that Sir Goldsworthy Gurney made his famous journey in a "steam carriage" from London to Bath and back. Gurney was a surgeon in Marylebone, greatly given to the working out of inventions in his spare time, and it took him some years to complete his first "motor" in his back yard in Albany street. He accomplished the journey to and from Bath at the rate of fifteen miles an hour, and there was only one disturbing incident, when a crowd assembled at Melksham set upon the machine, and, having burned their fingers, threw stones and seriously wounded the stoker. This Gurney journey stands as the first example of locomotion by steam in England.

## Mankato Council's Method.

By the provisions of a new park ordinance just passed, the City Council of Mankato, Minn., has given to automobiles practically exclusive possession of one of the roads up Sibley Park Mound. A debate in the Council indicated a general agreement of opinion on the point that it would be to the interest of all concerned to have an arrangement which would practically restrict horse and automobile travel in the park each to its own road. This has been accomplished in a somewhat indirect way by excluding automobiles, motor vehicles and motor cycles from one of the two roads, but the ordinance appears to be satisfactory to both automobile and team owners.

## Why the Moyea Company Rejoices.

The new Moyea car has come to town, and the sorely tried patience of the Moyea Automobile Co. is amply rewarded. The car is a



THE POWERFUL-APPEARING MOYEA.

replica of the one shown at Madison Square Garden in January, and that smartly designed and well constructed vehicle, with its handsome finish, has been, if anything, improved upon. Now that deliveries have been begun, the cars will come through at the rate of two a week, the factory being in such shape that only the final stages of work remain to be done on most of the cars.

## Elmergreen on Horse Regulation.

President Elmergreen of the Milwaukee, Wis., Automobile Club, has decided views on the subject of regulation of horses, and declares that they should be licensed. "The automobile will supplant the horse in a short time. It is evolutionary and inevitable," he says. "In ten years from now people will be placed where they will no longer permit any one to drive a horse. Nowadays country boys and men come to the city and hire out as coachmen. They are used to country horses. Then they get a spirited, nervous city horse to drive among the racket and noise of the city streets, and the results—well, they are shown daily by numerous accidents.

"A license would place the horse and machine on a rightful level as related to the safety of mankind. There ought to be examining boards, etc., for horses and drivers."

## PISTON AND CYLINDER

The Close Fitting That is Necessary and how  
It can be Obtained.

All the best makers bore out their cylinders to a certain size, which is most carefully gauged, and their pistons are also turned to a given size and likewise gauged, one-thousandth of an inch being the limit of error allowed.

After turning the cylinders are placed in a machine and are "lapped out," i. e., a disk of lead revolving at high speed is run into the cylinder, which is fed up with fine flour emery and oil. The emery in this case beds into the lead rather than into the surface of the cylinder, and by this means a high polish is obtained. The piston is also revolved in the lathe and ground down to size with a fine emery wheel. The piston when removed

from its lathe is a dead fit in the cylinder, i. e., when the piston is put into the cylinder and can be pushed backward and forward by the hand without any great effort, and yet at the same time there is no space wasted between them. The limitation of the fit is eventually something under one-thousandth of an inch.

Expansion and contraction are not of such great moment, as there are different weights of metal in the cylinder and in the piston. Therefore the larger quantity of metal in the cylinder should, theoretically, expand more than the smaller amount in the piston, but as the temperature of the piston is slightly above that of the cylinder on account of the water cooling, the fit remains practically constant at all temperatures. Piston rings, of course, are fitted to maintain a gas tight chamber, the mere fit of the piston not being relied upon. If the piston were made smaller than the cylinder in the first place a loss of compression would result.

An automobile line over the Seven Pines Road to Cold Harbor, Va., and through Hanover County, in that State, is projected.

## SOME DUNLOP MUFFLERS

### Two Devices That the Air Tire Inventor has Just Brought Out.

From time to time particulars of the work which J. B. Dunlop, the famous inventor of the pneumatic tire, has been prosecuting with respect to motors have been given forth. Several years ago Mr. Dunlop became interested in automobiles, and a number of devices designed to improve features which he deemed imperfect have been produced by him. The major portion of his attention was given to mufflers. He objected to the noisy emission of the used gases that accompanied practically all fittings of the kind, and set himself the task of designing a muffler that would really muffle. Three different types are the result of the Briton's labors, each of them differing markedly, and being ready for placing on the market. Two of these designs are thus described:

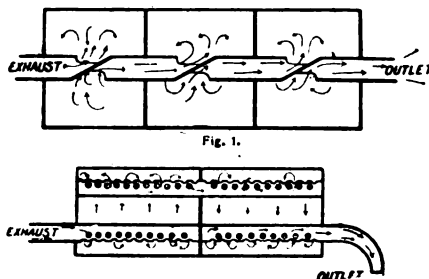
In Figure 1 the exhaust box has a straight tube through its centre, and this tube has apertures oppositely cut in it at three points in its length. Between the holes, and forming the tube into compartments, is a diagonal partition which completely closes the bore of the pipe, at the same time deflecting the gases outward into the surrounding chamber. The external casing is also formed with two parallel partitions, so that the whole silencer is divided into three compartments of considerable volume, one for each pair of diametrically opposed holes. The path of the gas is outward, therefore into the first of these chambers, where it expands, and then in through the opposite aperture through the central pipe to the second compartment, thence to the third in a similar manner, and from the third to the atmosphere by the pipe again. The arrows indicate the path of the gases. This is the type that Mr. Dunlop employs on his own car, and the egress of the exhaust gas to the air is completely inaudible at six feet.

However, the inventor lays great stress on the fact that exhausting should be accompanied by as little back pressure as possible, and with the elimination of this in view he constructed a second pattern of muffling apparatus which would give greater freedom to the passage of gas than the first; and, although his intention was to employ this type solely for motorcycles, the results have been so eminently satisfactory that he has adopted it as the standard pattern. A section is seen in Fig. 2.

In this apparatus the exhaust gas enters a tube having a partition in the centre which has a large number of holes (of considerable area) drilled in it for its whole length, but only on one side of it. Parallel with this tube is another, drilled in the same manner as the first, but so arranged that the holes are turned away from the first tube, as seen

in the figure. Surrounding these tubes is a casing having a central division plate, which coincides with the partition in the first tube, while the second tube is clear throughout its length, being only closed at the ends. The gas enters the inlet end of the first tube, and, being checked in its flow by the partition therein, issues through the numerous holes in the side and expands into the surrounding chamber, afterward entering the second tube, through which it is transferred to the lower compartment, into which it expands again through the lower series of holes, and from there it passes to the first tube again, below the interception, and to the atmosphere by means of the bent flattened nozzle.

It will be observed that the theory of both is identical. The gases in the first case are emitted with considerable force through a single aperture into an expansion chamber, where they divide and expand, afterward having to pass through a second hole opposite to, but distinct from, the first. The gas is, however, entering this second hold in two separate streams, owing to the former division of the gas, and these streams are moving with considerable force, the whole gas being in a



state of violent vibration. The impact, or collision of the streams, however, since both are equal in force, and the amount of vibration, cause them to neutralize one another, with the result that both the vibration and resultant velocity of the two streams coming together are greatly checked, and, further, the sound waves on impact are flung outward into the body of the silencer instead of being carried forward. The series of expansions and contractions, too, tend largely to cool the gas, and it is only just warm when it leaves the last chamber. With the parallel pipe type the same action goes on. There is an expansion outward into the chamber, the re-entering, on the opposite side (of another pipe in this case), a re-expansion and a second influx, precisely the same fundamental principle as that of the first mentioned apparatus, the only variation being that two tubes are employed in the place of one. This muffler is remarkably free, and as an instance of its freedom Mr. Dunlop states that for one square inch area of exhaust pipe the egress gives one and three-quarter square inches. The results, as regards noise, are even more remarkable, and no sound except that of the engine mechanism and the gear is audible at all. Even an explosion in the muffler is barely noticeable, and experiments have

shown, further demonstrating the unusual immunity from back pressure, that it is impossible to burst it by firing in the muffler.

### Pliers of Many Kinds.

There are several patterns of pliers, two of which are usually to be found in the motorist's well appointed kit, i. e., flat nose and gas. In addition to these, many also carry a pair of the round-nose type, which are particularly useful on occasions. The ordinary pattern flat nose pliers are more or less unsatisfactory tools, as the manner in which they are jointed only permits of their obtaining a hold upon a narrow surface of the jaws. Those fitted with toggle-jointed jaws are preferable, as they are thereby always kept parallel, and a firm grip is obtained. In using the ordinary pliers the object to be held should be kept as near to the nose of the jaws as possible, as in this position there is the least likelihood of its slipping out. In using the tool the top handle should rest beneath the ball of the thumb, the four fingers gripping the lower handle. Even experienced mechanics will unthinkingly at times place the forefinger above the lower handle, with what results, when the tool slips, can well be imagined. This is not so liable to occur with parallel jaw pliers. A pair of  $\frac{3}{4}$ -inch gas pliers—which will hold a circular piece up to  $1\frac{1}{8}$  inches outside diameter—are very useful tools to have in the kit, as, if necessary, they may be used to tighten up nuts.

### Placed Dog on Guard.

Motorists who have been troubled by small boys and other inquisitive persons "monkey-ing" with their cars when standing should follow the example of an English user, who has trained his dog to guard the car. The canine is placed sometimes on the bonnet, sometimes in the seat, attired in a pair of goggles and a collar; and no one ventures to investigate the purposes of the various levers while he is around.

### Through Australian Bush.

A noteworthy journey has been made by an Australian motorist, B. Thomson, of Adelaide. He drove a De Dion car from Adelaide to Melbourne, a distance of 596 miles, much of which was over unmade roads, bush tracks and sand. He covered the distance in 38 hours 14 minutes, using only twenty-three gallons of gasoline.

### Park Commission Wants Auto.

Secretary M. P. Hurlbut of the Detroit (Mich.) Park Commission, has asked permission of the City Council to expend \$872 in the purchase of an automobile for the use of the commission. In view of the fact that the work of the commission involves travel over forty-four miles of roads, Mr. Hurlbut recommends the automobile as more economical than horses, which are used at the present time.

### The Art of Filing.

Files make almost indispensable tools, and two or three of them should be included in the outfit of every motorist. The most useful sizes to carry are six inches long and of flat and half round sections, of a "cut" known as "bastard," this being between the rough and smooth files.

There is really an art in using a file, more so than would be imagined, for the mechanic who can file flat has something to be proud of. As it may happen that a flat surface has to be filed up at times, the method of arriving at this will be of interest. If an appreciable amount of metal has to be removed the file should be used across the metal at an angle of 45 degrees, first in one direction and then in the other, so that the file marks make a right angle to one another. When almost sufficient metal has been removed the final touches must be given by "draw filing," preferably with a fine cut file. This is done by taking the file in both hands, and, holding it at a right angle across the piece, draw it backward and forward along the surface, using a gentle pressure. It will be noticed that the first file marks invariably show in the centre of the surface, and work down until they reach the edges. If a fine file is not at hand it is better to reduce the cut of the "bastard" by filing the teeth with a little chalk and oil.

In filing flats on spindles for keys the above method is always employed. In reducing the diameter of a short rod, or

spindle by filing, the "drawing" action should always be used. For instance, suppose an exhaust valve stem has to be reduced to fit the guide. The way this should be done is in the following manner: Over the vice jaws should be placed lead or copper clamps, so that the cutting on the jaws cannot mark the stem. Place the jaws at such a distance apart that, while the stem is not actually held between them, it is sufficiently wedged in by the pressure placed upon the file to hold it in position. Obviously, the greatest care should be exercised in filing up such parts.

The most difficult of all files to use is the round one, and when a perfectly round hole is required it should never be touched with a file, but reamed out, only the roughest work being touched with a file, so far as enlarging holes is concerned. A file which should be carried is a flat watchmaker's for truing up platinum contact points.

### A Much Travelled Car.

From Minneapolis to St. Louis is the route Harry E. Wilcox, of the former place, started to traverse last week. He is using a Win-ton touring car, and is going by way of Winona, La Crosse, Dubuque and Muscatine. If the roads are good, he will return in the car, but if bad, he may return by boat.

The car has something of a record for towns visited, having been in 265 different towns and villages. Mr. Wilcox made a trip from Chicago to Minneapolis last year.

### Light After Darkness.

Light is breaking into the dark places. Into the sanctums of the tall buildings, where the newspapers are made, effulgence is breaking through. Just listen to this simple and clear word from the New York American:

"A manhole cover was blown up by gas near the Waldorf-Astoria on Sunday, almost at the side of a large automobile, and a block away from where forty cabs were standing.

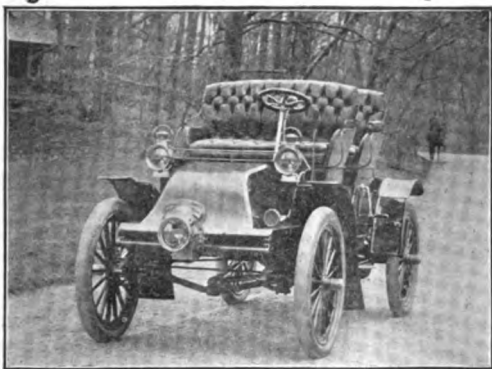
"The iron disk narrowly missed the party in the motor car, but the only actual injury that resulted from the accident was done by the cab horses, which, terrified by the explosion, ran away in all directions, imperilling hundreds of people before the drivers got them calmed into quietness.

"The relative danger of horsedrawn and motor propelled vehicles to the people on the streets was never more clearly contrasted.

"The automobile is under direct control at all times; it neither shies at noises nor becomes panic stricken at unfamiliar sights, and it stands without tying.

"Had a spirited team been in the place of the automobile when the street became a volcano, the result would have inevitably been a disaster, in which either the occupants or the men and women in the vehicle crowded street would have been the sufferers."

The Swiss Automobile Club has 439 members. Of these 320 are Swiss, who own 550 cars.



SURREY, 12 HORSE-POWER, \$1800 Front head-light extra..

## THE HAYNES-APPERSON

Is the **ONLY** gasoline automobile that ran the contest from New York to Boston and back without repairs or adjustments of any kind.

*It is the only machine that has won EVERY Endurance Contest held in America and every contest or race ever entered.*

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The machine **you** buy is the kind that makes this **Absolutely Unequaled Record.** Our catalogue gives the records complete. Send for it and ask for the "Little Book," too.

Inquirers are urged to visit our factory where every detail of Haynes-Apperson superiority can be seen and fully understood.

**HAYNES-APPERSON CO., Kokomo, Ind., U.S.A.** *The oldest makers of motor cars in America.* Branch Store, 1420 Michigan Ave., Chicago.

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National Automobile & Manufacturing Co., Pacific Coast Agents, San Francisco.

JOHN MAXWELL, Oneida, N. Y., Agent for Central New York.

## The Week's Patents.

731,781. Igniter for Explosive Engines. Thomas B. Jeffery, Kenosha, Wis. Filed March 10, 1902. Serial No. 97,444. (No model.)

Claim—1. In an explosive motor an igniting means comprising a catalytic element; a chamber within which it is located, communicating with the explosion chamber of the motor; a source of gaseous mixture adapted to excite the catalytic element, and communication from such source to the chamber containing the latter; a carrier on which said catalytic element is mounted and held exposed within the chamber to said excitant mixture; and means for moving the carrier to carry the catalytic element through said excitant in the chamber.

731,800. Hydrocarbon Vapor Burner. Athol B. Macklin, Brooklyn, N. Y., assignor to Edward H. Fessenden, Brooklyn, N. Y. Filed July 2, 1902. Serial No. 114,129. (No model.)

Claim—1. A hydrocarbon vapor burning apparatus comprising a main burner body having a central tube, a mixing chamber surrounding the central tube, and a burner, a mantle, an upper vaporizer located vertically parallel with and alongside of the mantle, a lower burner body, having a heating chamber, depending gas tubes, connecting the mixing chamber of the main burner body with the heating chamber of the lower burner body, a lower vaporizer supported in the lower burner body beneath the central tube, playing thereinto and drawing the gas through the depending gas tubes and through the heating chamber and a vapor pipe connecting the upper vaporizer with the lower vaporizer.

731,872. Motor Mechanism. Francis G. Echols, Hartford, Conn., assignor to Pratt & Whitney Co., Hartford, Conn., a corporation of New Jersey. Original application filed August 25, 1902. Serial No. 120,953. Divided and this application filed December 18, 1902. Serial No. 135,794. (No model.)

Claim—1. A motor comprising a shaft; a piston secured to the shaft and having a wing; a piston chamber in which the piston and wing are mounted; means for supplying fluid under pressure to said chamber; a bracket projecting from the piston chamber; an arm adjustably secured to the bracket, and a spring connected at one end to the piston and at its opposite extremity to said wing.

731,993. Automobile. Charles A. Bush, Corry, Pa., assignor of one-half to John J. Loomis, Northeast, Pa. Filed October 23, 1901. Serial No. 79,621. (No model.)

Claim—1. In an automobile, the combination with the drive wheels having crown gears fixed thereto, of reciprocatory drive shafts having pinions for alternate engagement with the crown gears at diametrically opposite points as the shafts are reciprocated, a motor including piston rods, and pitmen connecting the piston rods with their respective drive shafts and having ball and socket connections therewith.

731,995. Internal Combustion Engine. Arthur T. Collier, St. Albans, England, assignor of one-third to Arnold Elworthy Williams, London, England. Filed February 16, 1903. Serial No. 143,716. (No model.)

Claim—In an internal combustion engine, the combination with the cylinder, of a main piston, an auxiliary piston, a piston rod to said auxiliary piston, an arm or crosshead having an aperture to receive said piston rod, a guide for said crosshead, collars on said piston rod on opposite sides of said cross-

head, a spring arranged between the outer collar on said piston rod and said crosshead, and a crank and connecting rod for reciprocating said crosshead through a distance greater than the travel of said auxiliary piston, substantially as described and for the purpose specified.

731,996. Method of Operating Alternating Current Electric Motors. Rudolf Eickemeyer, jr., and Mary T. Eickemeyer, Yonkers, N. Y., executors of Rudolf Eickemeyer, deceased. Original application filed July 6, 1894. Serial No. 516,724. Divided and this application filed May 13, 1902. Serial No. 107,146. (No model.)

Claim—1. The method of converting electric energy into mechanical motion, substantially as hereinbefore described, the same consisting in the direct excitation by a single alternating current of a series of magnetic circuits in one element of an electric motor; then inducing from said magnetic circuits a current in a series of closed electric circuits in the other element of the motor, and then causing the initial motion of one of said elements by mechanically shifting the terminals of the directly excited circuits, and thereby changing or varying the flow of magnetism in the directly excited magnetic circuits in the matter of position, strength and direction, and thereafter ceasing said shifting action and enabling the driven element to continue its motion.

732,025. Steering Gear for Vehicles. James L. McDowell, St. Louis, Mo., assignor of one-half to William C. Gordon, St. Louis, Mo. Filed December 11, 1902. Serial No. 134,822. (No model.)

Claim—In a vehicle, a wagon body, an oscillating front axle therefor, a toothed segment secured to the axle, a steering staff, a pinion at the lower end of the staff engaging the segment, a bracket for said staff, an adjustable or movable collar on said staff mounted above and resting on said bracket, arms carried by the staff, a horizontally oscillating bar pivoted to the floor of the wagon body, arms depending from said bar, connecting rods coupling said depending arms with the arms of the staff below the wagon body, the parts operating substantially as and for the purpose set forth.

732,032. Sparking Plug. William Barber, Brooklyn, N. Y., assignor to Ada S. Barber, Brooklyn, N. Y. Filed August 20, 1902. Serial No. 120,352. (No model.)

Claim—1. In a sparking plug, the combination with a bushing of metal provided with a male thread on one end and a female thread in an enlarged cavity at the other, of a flanged bushing or cylindrical plug of non-carbonizable frangible insulating material located in the male threaded portion of the metal bushing, a like flanged bushing of frangible insulating material located in the enlarged cavity of such bushing with its flanged head abutting against the flanged head of the frangible bushing, or plug, a metallic gland screwed into the female thread of the cavity so as to force the flanged heads of the two insulating plugs together, a metallic rod passing through both plugs, provided on one end with a head and on the other with means for securing a securing device thereto, and a sparking point secured to the male threaded end of the bushing with its point in juxtaposition to the head of the rod, substantially as shown and described.

732,048. Means for Holding Cylindrical Tool Shanks. Joseph A. Coburn, Norwood, Mass., assignor of one-third to Harvey E. Farrington, Norfolk, Mass. Filed September

13, 1902. Serial No. 123,299. (No model.)

Claim—1. The combination with a spindle having a tapered bore of an insertable tapered tool shank holder adapted to fit within said bore, said holder having a tool shank socket; and pivoted means carried by the holder for retaining the tool shank in position, said means being movable to a position with its outer surface flush with and forming a continuation of the outer surface of the holder, the opposing tapered surfaces of the spindle and holder co-operating, under pressure, to close said means upon the tool shank with increasing pressure.

732,199. Vehicle Wheel Tire. Samuel C. Lines, Curtice, Ohio. Filed December 26, 1902. Serial No. 136,594. (No model.)

Claim—1. A supplemental tire or tread carrying a plurality of blocks of a yielding substance, said blocks adapted to find bearings in the ordinary concave periphery of a vehicle wheel.

732,237. Rubber Tire. Edward B. Tragler, Akron, Ohio. Filed January 26, 1903. Serial No. 140,616. (No model.)

Claim—1. The combination with a felly of a wheel provided with an ordinary flat metallic tire, of T headed bolts arranged to pass through said tire and felly provided with comparatively long, narrow heads, a rubber tire provided in its base portion with grooves adapted to inclose said T heads and to seat on said metallic tire, longitudinal wires embedded in said rubber tire, separated from said T headed bolts by a stratum of rubber and forming no connection therewith.

732,278. Noiseless Tire Protector. Lincoln C. Cummings, Pasadena, Cal. Filed July 14, 1902. Serial No. 115,566. (No model.)

Claim—1. In a tire protector, the combination of an annular leather band adapted to form the tire tread, with a strip of canvas folded upon itself with its edges overlapping at the midwidth, a second annular leather band between which said folded strip is inserted, means whereby said bands and strips are secured together, said second band provided with perforations in which the tire is adapted to embed, and means for holding said protector upon the tire.

732,283. Motor Vehicle. Joseph B. Ewer, Crowley, La. Filed February 21, 1903. Serial No. 144,461. (No model.)

Claim—In a motor of the character specified, the combination with a suitable frame having carrying wheels; actuating gears 13 rigidly secured to the carrying axle and to said wheels; a power transmitting shaft 15 upon one end of which is rigidly secured the gear 14; while upon the other end is secured a sleeve carrying the gear 14<sup>b</sup>; gears 17<sup>b</sup> and 17<sup>c</sup> secured, respectively, to the shaft 15 and the sleeve 14; a driving gear 17; having a plurality of auxiliary gears 17<sup>a</sup> disposed normally in mesh with the gears 17<sup>b</sup> and 17<sup>c</sup>; a power conveying shaft 19; having a gear 18 disposed in mesh with the gear 17, the shaft 19 also having loosely mounted thereon the gears 21 and 25; means to apply power to both of said wheels whereby they will be freely turned in either direction, and a tubular connecting shaft 9 having a swivelled head and a power conveying rod 41 disposed within said shaft and means to operatively connect the rod by suitable gearing with the driving gears 21 and 25, as and for the purpose set forth.

732,343. Internal Combustion Engine. Arthur F. Evans, Cambridge, England. Filed February 24, 1903. Serial No. 144,768. (No model.)

Claim—1. In an internal combustion engine, the combination of a working cylinder

provided with admission and exhaust ports, a piston working in said cylinder, an air compressing chamber intermittently put into communication with the working cylinder as the piston reciprocates, a fuel receiving chamber in constant communication with the air chamber and intermittently connected with the working chamber as the piston reciprocates, and a fuel supply passage leading to the fuel receiving chamber, the organization being such that as the piston reciprocates fuel is sucked into the fuel receiving chamber, then air is compressed therein, and then the fuel and air pass from the fuel chamber with air from the compressed air chamber to the cylinder.

732,346. Electric Igniter. Albert F. Ganz, Hoboken, N. J., assignor to the Auto-Igniter Co., New York, N. Y., a corporation of New Jersey. Filed January 29, 1903. Serial No. 140,987. (No model.)

Claim—1. In an igniter of the character described, the combination with an inductor independent of the flywheel, said inductor having a cutaway portion of large angle, the peripheral extent of said cutaway portion being smaller than the continuous portion, of a magnet whose poles co-operate with said inductor, and a coil carried by a pole of the magnet, substantially as and for the purposes set forth.

732,364. Electric Igniter. Herbert G. Mears, New York, and Henry W. Aylward, Brooklyn, N. Y., assignors, by mesne assignments, to the Auto-Igniter Co., New York, N. Y., a corporation of New Jersey. Filed November 19, 1902. Serial No. 131,971. (No model.)

Claim—1. In an igniting device of the character described, the combination of a magnet, a coil surrounding one of the poles thereof, a separate removable polar extension carried by the other magnetic pole, and an inductor movable with respect to the coil, substantially as and for the purposes set forth.

732,371. Generator for Electric Engines. Leon J. Le Pontois, New York, N. Y., assignor, by mesne assignments, to the Auto-Igniter Co., New York, N. Y., a corporation of New Jersey. Filed February 15, 1902. Renewed January 10, 1903. Serial No. 138,518. (No model.)

Claim—1. In a generator for producing pulsating currents, the combination with a horseshoe magnet, of a coil surrounding one of the poles thereof, and a movable mass of low magnetic reluctance adapted to close the magnetic path through said coil and pro-

vided with a section of high magnetic reluctance, whereby when said mass is moved the section of high magnetic reluctance will divert the path of magnetic flux outside of the coil and thus generate a current in said coil, substantially as set forth.

Gear. George R. Boulding, Wells, Nev., assignor of one-half to Robert M. Steele and Amos C. Olmstead, Wells, Nev. Filed December 31, 1902. Serial No. 137,322. (No model.)

Claim—1. In a vehicle, the combination with the frame of a driving axle, a wheel hub mounted to slew, a means working between the axle and wheel hub to drive the latter from the former, an annulus with which the wheel hub has rotary connection, means for mounting said annulus to rock on the frame, and an independent means for imparting a rocking movement to the annulus.



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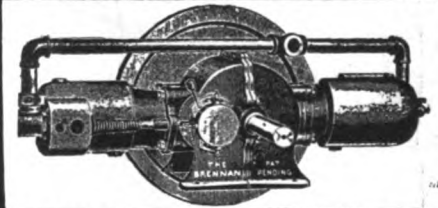
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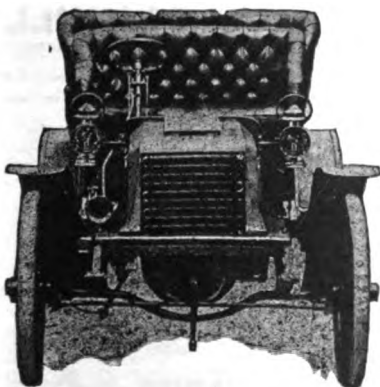
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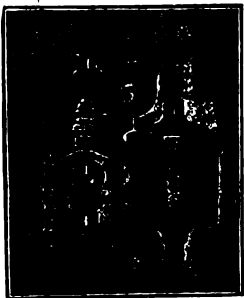
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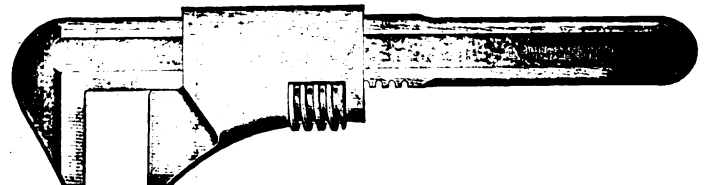


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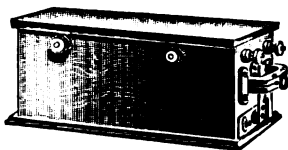
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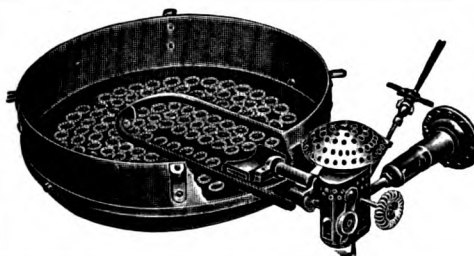
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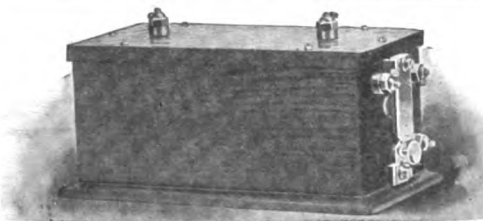


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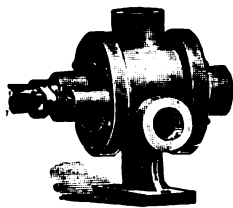


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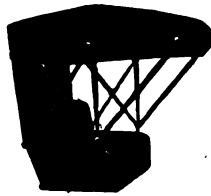
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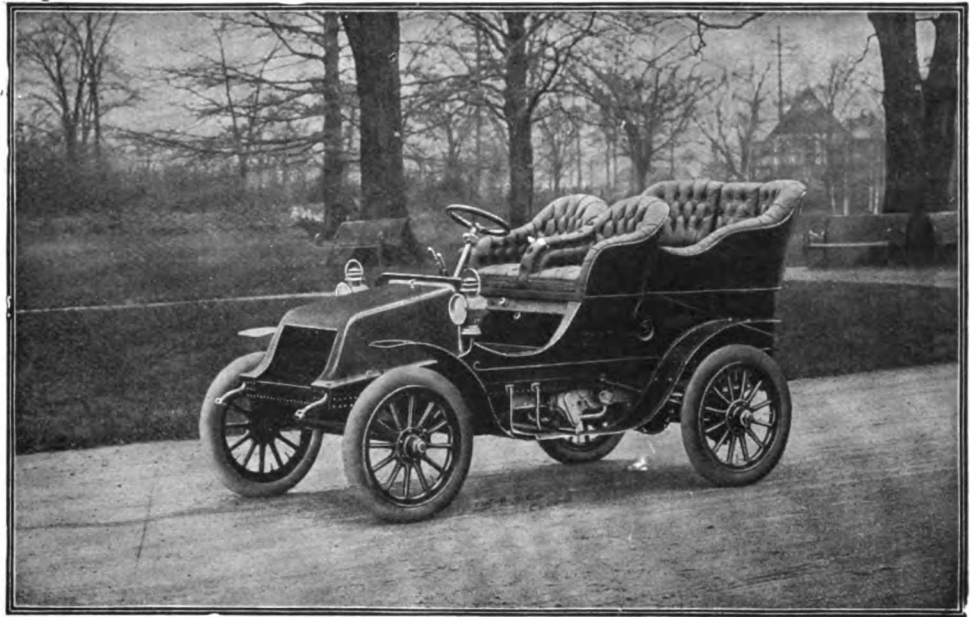
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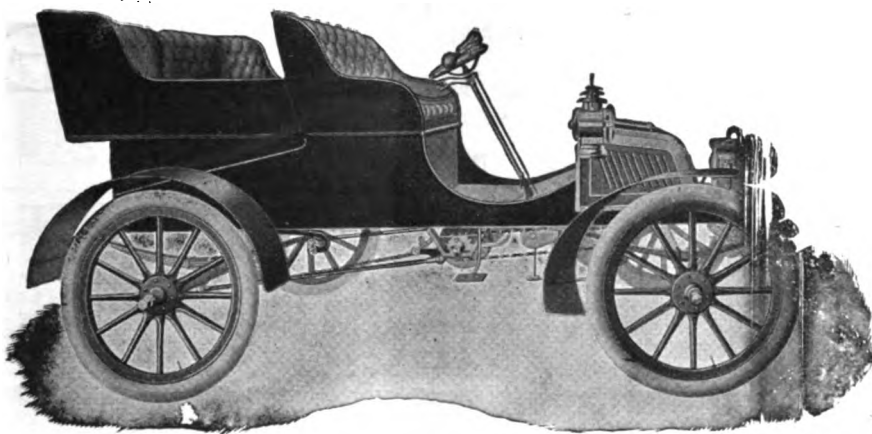
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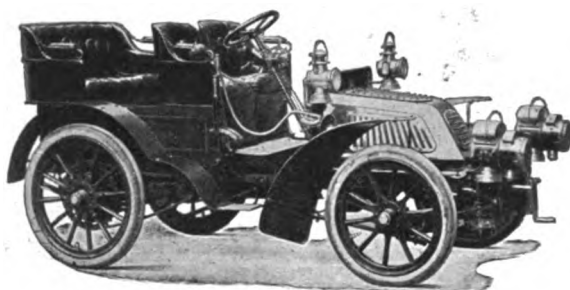
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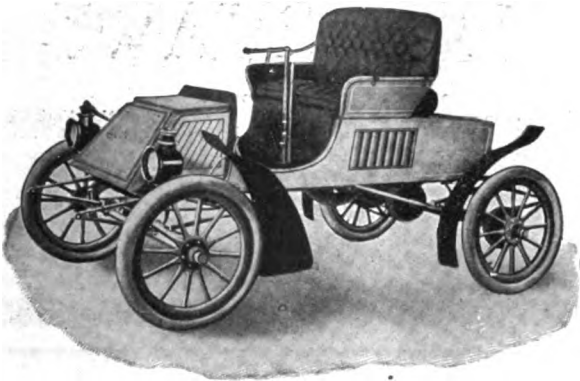
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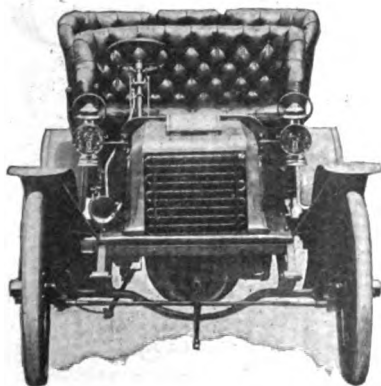


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First and second places in 5 mile pursuit race; 16 contestants.

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Again the genuine detachable G & J Tires demonstrate they are the fastest and most reliable automobile tires in the world.

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OLDFIELD'S RECORD AT COLUMBUS, O., JULY 4, 1903.					
1st mile,	.	56 2-5	One mile,	.	.56 2-5
2nd "	.	59	Two miles,	.	1.55 2-5
3rd "	.	59 3-5	Three "	.	2.55
4th "	.	1:00	Four "	.	3 55
5th "	.	59 3-5	Five "	.	4.54 3-5
6th "	.	59 3-5	Six "	.	5.54 1-5
7th "	.	1:01	Seven "	.	6.55 1-5
8th "	.	1:00	Eight "	.	7.55 1-5
9th "	.	59 3-5	Nine "	.	8.54 4-5
10th "	.	1:00	Ten "	.	9.54 4-5
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TOTAL,	.	9.54 4-5	Mile Average,	.	59 4-5

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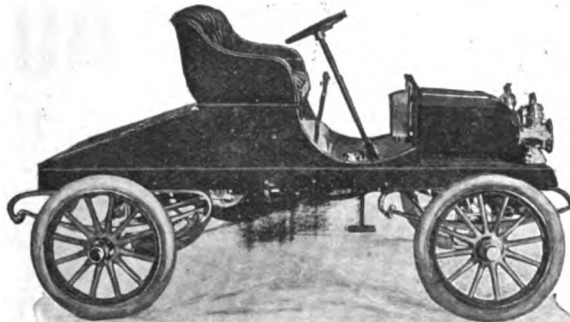
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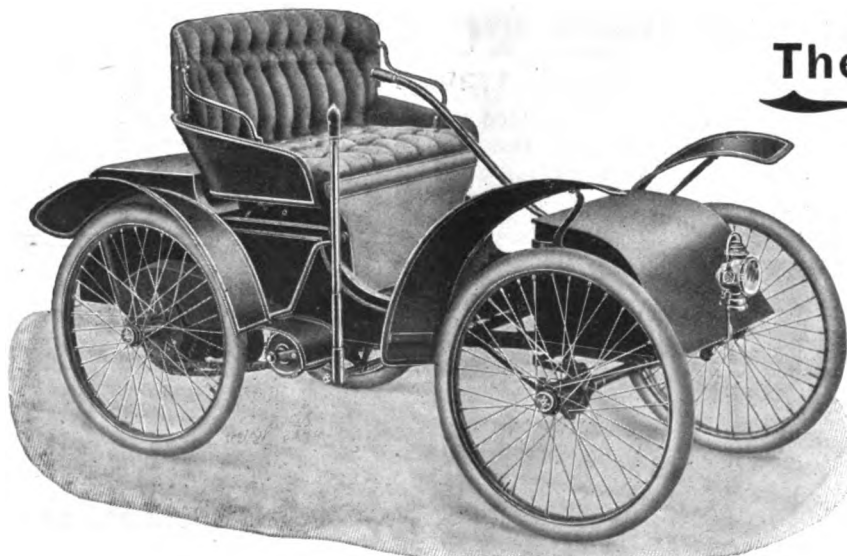
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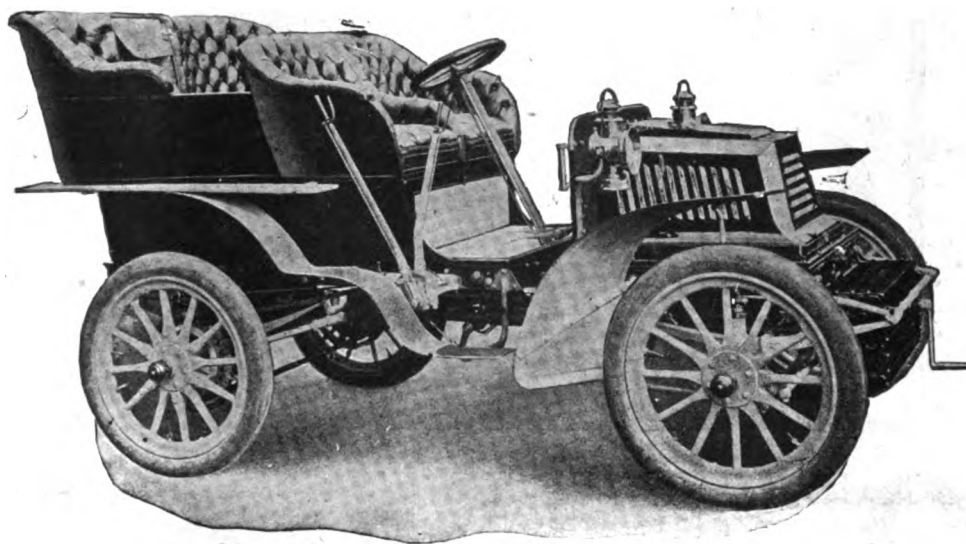
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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, July 16, 1903.

No. 16

## LUCK AND PERSONAL SKILL TRIUMPH.

**Bennett Cup Race a Tribute to Jenatzy's Marvellous Manipulation of His Car—French Team Drove Carefully and all Survived—That Curious Winton Story—Huge Crowd Expected did not Appear—Arrangements Well Nigh Perfect but Marred by Official Snobbery.**

Dublin, July 3.—At dusk last evening—and over here dusk means after 9 o'clock—there drew up in front of the Shelburne Hotel a Winton touring car containing six persons, and the large crowd gathered there parted to make way for it, as it had parted for cars that had preceded it and for others that came after. From the bonnet of the Winton there flew two small American flags, one on each corner.

At the sight of the flags the crowd cheered—cheered heartily enough to bring the guests of the hotel to the doors and windows. All nations were there, and it is not strange, therefore, that a supercilious "Those Americans!" was the remark overheard several times.

But this reception, warm as it was, was mild in comparison with what had preceded it. For thirty miles, or from near Ballyshannon Cross Roads, the starting point of the race for the James Gordon Bennett Cup—here it is "Gordon-Bennett," with the hyphen always—the flag bedecked Winton car had come. It is possible that had it been conveying his majesty, the King, or his Lord Lieutenant, who is a keen motorist, and who attended the races, or even the victor in the race itself, the car might have been received with more enthusiasm and been greeted with greater acclaim; but it may well be questioned.

The populace of Dublin and of the outlying towns and villages had apparently expected that the winner would be driven into the city

in triumph or that some of the competitors would be displayed to their gaze. Hence the common people, big and little, old and young, turned out and lined the road, and in Dublin itself lined the streets three and four deep. They saw not the victor, nor other notables, but the snapping little American flags gave them a chance to display their feelings. It was thirty miles of respectful hat raising, of vigorous handclapping, of vociferous cheering, cries of "Good old America!" that left no doubt that love of the Stars and Stripes and what they stand for is planted deep in the Irish heart.

It was a remarkable demonstration, as spontaneous as it was unexpected, and at times embarrassing to the unwitting causes of it all. The car conveyed, not conquering heroes, but six humble American people, two of them ladies; America had not done itself proud in the race; there was absolutely no cause for the outburst. It was a tribute to the flag, and one that sharpened appreciation of the placard observed in a little Irish village a few days before by the Motor World man, who was one of the party. The placard advertised an unknown brand of American plough, describing it as the "favorite plough of the Irish-American farmer trade in the United States." The members of the American team, Winton and Owen, who for several weeks had been quartered at Moone & Mooers', at Ballitore, all felt and remarked on this warm Irish regard. The Irish were "with them" in the race. This

incident has little to do with the race for the cup, but it is a bi-feature too remarkable not to be prominently recorded.

As all the world now knows, the race was won by a Belgian, in a German car—Camille Jenatzy—who covered the 370½ miles on serpentine Irish roads in 390 minutes, or, to be exact, 6 hours 36 minutes 9 seconds, net time—an average of 56.1 miles per hour, or each mile in 1:07—speed so terrific as to fairly stun the senses, rivaling the flight of great birds and the speed of monster locomotives held true to the course, not by a pair of human hands, but by the smoothest of steel rails. René De Knyff, of France, starting fourteen minutes before Jenatzy, finished two minutes ahead of him, but the net time made it a case of "the second is first."

The world knows also that Anglo-Saxon pride was humbled and hopes shattered. Not an American completed the course, and but one Briton, and he was a bad last. Percy Owen might also have finished had he coveted Edge's "honor" and desired to prolong the agony and close the roads for an hour or two more. Both teams all but utterly collapsed. It matters not the cause or causes. It is enough that they failed. The world knows little of anything else—indeed, at this writing, some twenty hours after the finish of the race, not even Dublin knows definitely whether De Knyff or Farman earned second honors. The Automobile Club of Great Britain and Ireland is full of the egotism, priggishness and pomposity so vividly repre-

sented in the person of the president of the Automobile Club of America, and the defects of the great race hung and hang heavily on the officials and the committee in charge. The latter met at 4 o'clock this afternoon, and after solemn deliberation gave out "their official declaration, subject to reservations they may publish later." The declaration places the men in this order:

	H.	M.	S.
1. Jenatzy (Germany).....	6	39	0
2. De Knyff (France).....	6	50	40
3. Farman (France).....	6	51	44
4. Gabriel (France).....	7	11	33
5. Edge (England and Ireland)...	9	18	48

around like hens with heads off, in order apparently that the public might see them. While Winton was endeavoring to right his balky carburetter one of the prigs grandiloquently ordered every one away from the car that "the man (Winton) may have a chance, ye know." The fact that Winton was on the opposite side of his car, and that no one was near him mattered nothing. Later, another prig ordered Winton himself off the road; he was most insistent about it, and hopped about like a dancing ass in a circus. Finally Winton turned, and what he said cowed the chap so that he slunk away like a

courtesy and facility would be accorded the press, that stewards with yellow badges would be scattered everywhere, and a press man need but whistle, or snap his fingers or tap the yellow fellow's arm and the yellow would fly to do his bidding and obtain any information possible. As a matter of fact, there were no yellow badges in evidence at any time, and no facilities or courtesies or anything else, except incivility. The Dublin papers of this morning all refer to the subject. One of last night's prints scores the press arrangements unmercifully and terms the officials "lofty mannered popinjays."



CAMILLE JENATZY, WINNER OF THE CUP.

It is not strange that the committee announced the awards with reservations. There were so many clocks and watches in use—eighty-odd—that they are understood to be having the devil's own time making the times agree in order that an authentic table of times by rounds may be compiled. Several tables of the sort have been given out, but they are not worth much more than the paper they are printed on.

These officials, or perhaps it is well to say most of these officials, and committee-men were a sight for the gods yesterday. Self-importance and responsibility made their shoulders sag more than British shoulders usually sag. As there was not a great deal for the committeemen to do, they danced

whipped pup. The substance of Winton's sharp speech, delivered in a tone not to be forgotten, was that he would stay just where he was as long as he pleased, and that no one present could make him go anywhere else. And stay there he did. Not even the dapper and cocky officers of the Royal Irish Constabulary, with whom the prigs hobbled and posed, made any effort to move him.

The timekeepers and certain other officials were inclosed in two tents, and the tents were on holy ground. Every one was waved away or was awed by the sanctity of the tents and their occupants. Thrice the Motor World's "innocent abroad" invaded the temple. The programme had stated that every

Failing to find yellow badges, the Motor World's "innocent" sought the tent for the first time. Foxhall Keene had just been given the word. His chauffeur, having failed to get the engine going, a Mercedes workman had stepped out and turned the crank. The unwise reporter from New York walked plump into the tent and asked the gentlemen if outside aid in starting a car was allowable. His question made them uncomfortable, and they passed it from one to the other, and finally decided that Mr. Lloyd, or Floyd, or Toyed, was the proper person to be seen. Then the gentle reporter asked for the official times of the starts—and actually got them, thanks to H. J. Swindley, the de-centest man under the canvas. Again, the



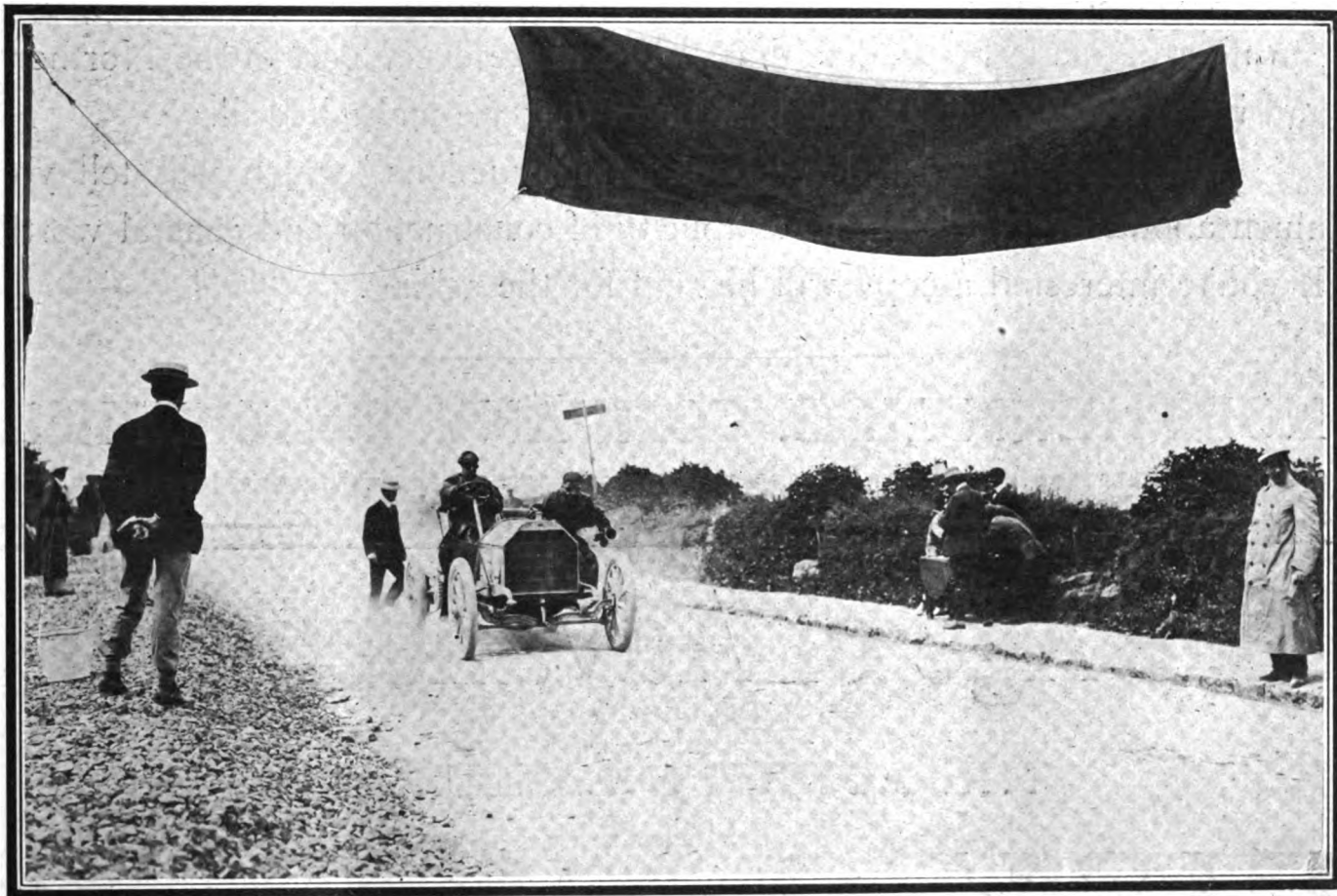
reporter trod the holy ground. The high and mighties were just emerging. Would they stop a moment until the Motor World's camera did its work? Would they stop? Did they stop? How many prigs when playing roles will refuse to face the focused end of a camera? Of course, they stopped! Happily, or unhappily, the film refused to receive the impression of their faces, although two others were "caught" at another time. The last time the Motor World man brushed aside ceremony and bearded the lions in their canvas den, Jenatzy had just crossed the line, and the cable was awaiting the word. To ob-

tent and cross the road. Apparently speaking to a friend in the field he would relate what had occurred. Others would hear him and "pass the word along." In this way it became generally known that Stocks and Jarrott had met with accidents and retired. But, although long overdue, nothing was heard of Owen until he finally appeared, and Mooers might as well have been at home in Cleveland, so completely was he lost.

If their antics on the day of the race induced "that tired feeling," it is not to be gainsaid that the committee's arrangements for the event were worthy of all praise. On

carrying canes. All were on duty from 5 o'clock in the morning until nearly 8 in the evening. After 6 a. m. the roads were closed, and, except at the controls, not a vehicle and no person, unless he was an official or an unusually smooth talker, dared cross the course.

Not an accident, save those to the contestants, marred the long day, and a long, unexciting one it was, too. It was also a sorry one for several Irish farmers. Scenting an enormous attendance, and seeing a chance to profit thereby, they had cut down their hedges and erected grandstands. They



JENATZY COMING TO A STOP AT ATHY.

tain the net time then was known to be impossible, but would the gentlemen oblige with the elapsed time? They would not oblige. The weight of the world was upon them. They must not be bothered.

"Where are the facilities and courtesies that were to have been extended to the press?" ventured the man of the pencil.

"Every newspaper was given a ticket," was the remarkable response.

The ticket admitted the holder to the grandstand and permitted him to tickle his ankles with the grass of an inclosed field. While there he might see a big blackboard, on which each contestant's time was posted on each round—time that was frequently corrected, thereby upsetting tables that had been carefully prepared. Certain points were connected by telephone, and when a message was received a man would start out of the

the route the dangerous razorback culverts peculiar to Irish roads and which are given to tossing one out of his seat with no little violence, had been levelled and smoothed; all controls, bad turns and corners had been not only well marked with flags, but the road for some distance in either direction had been oiled, and thus effectually laid the dust, and every lane and crossroad had been fenced off with wire netting, and stewards and Royal Irish constables stationed there. These national policemen, as a whole, are a courteous, good natured, smart appearing lot, looking more like soldiers than their American prototypes; as a rule they are young, straight and slender. There were a thousand or more girdling the entire course, and there were no slouches or paunches in the lot. Their officers are cocky young chaps, wearing riding trousers and leather leggings and

waited in vain for the expected crowds—and shillings. There was no crowd. Instead of thousands and tens of thousands of persons, there were but hundreds. At no point was there anything resembling congestion. Even the great grandstand erected across and over the road at the starting and finishing point was but half filled, while the structures of the speculative farmers were empty, or practically empty; one of them netted the bullock ten shillings; it must have cost fifty times that sum to build. The attendance was a surprise—an unpleasant surprise. This was the more remarkable because the morning was a perfect one, clear and cool, although later in the day sunshine and showers engaged in a playful game of hide and seek. The showers were short showers, and the sun shone in the end. It was a day that

(Continued on page 596b.)

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NEW YORK, JULY 16, 1903.

### A First-Hand Story.

Ah, ha! Here we have, at first hand, from our own man, R. G. B., the story of the great Gordon Bennett race. Much of the stuff printed about the event bristled with romance. Meagre three line facts were helped out to column lengths by opulent imaginations. But here we have a fine pen picture of the race thrown off at full steam by a man on the spot, by a man on the qui vive for truth and vivid impressions and competent to record both.

We learn for the first time many new facts about the Gordon Bennett event, that Winston was undone, and that the course was a devil's dance across the map, sinuous, narrow, now glancing sharply up, now down. There were, too, no clamorous and enthusiastic crowds, their blood whipped by excitement, by heroics. There was a meagre, mild crowd.

The officials, who had done splendid and commendable work of preparation, spoiled all

on the great day, for they appeared to pass into a state of egotistic hysteria. Indeed, they lorded it, and were unapproachable. The race, too, became a procession. There were throughout the day many moments entirely devoid of excitement. The element of competition was lacking, and the chief reward that fell to the spectators was the occasional flash past of a mad car, demon driven.

In our story you learn what happened to each man, how each looked, and so on. You learn, too, that Jenatzky is a gentleman amateur, who follows automobilism as a hobby. But, above all, you learn that the Irish people took the Americans to their inmost hearts, and whenever an American flag was displayed it awoke a right royal demonstration. The good, generous Irish.

### Tires.

Just as we were in danger of forgetting that tires were still to be reckoned with in big road races, so free have those of recent years been from troubles of this kind, we are brought up with a round turn and made to see that tires are still a factor in such events.

In the Ardennes race the winner of last year's event, Jarrott, was put out of the running by repeated tire troubles just when it seemed as if he would duplicate that performance. Nor was he alone. What was a veritable slaughter of the innocents took place in that race. Nearly half the contestants were put hors de combat by the vagaries of the air filled wheel coverings. In the Bennett Cup race Edge, of the British team, had puncture after puncture, and Mooers had a narrow escape from serious accident owing to his tire coming loose and throwing him out of the race.

It is interesting to review the causes of these troubles. In the cup race they seem to reflect no discredit on the tire makers. In Edge's case it was the persistence in using a tire absurdly inadequate for the purpose that was his undoing. While the other competitors wisely held to the big 5-inch tires, Edge, with what resembles fatuity, had the 3¾-inch size fitted to his car—and his subsequent discomfiture was well earned. Turning to Mooers, the burden of responsibility appears to be on him—that is, on the attendants who looked after his interests. The presumption is, when a tire comes off suddenly, that it has not been put on right; and it is only reasonable to set this accident down to such cause.

With the Ardennes race it is quite another

matter. There the happenings are strongly reminiscent; they recall the early days of big tires and big speeds, and the discovery that the effect of the one on the other was to set up extreme heat. To such an extent was this the case that the tread of the tire would frequently separate from the fabric, and even, in extraordinary cases, melt the rubber. This was almost exactly what happened on the Ardennes Circuit. Car after car was attacked and put out of the race, and their drivers were left wondering.

An explanation bearing some measure of plausibility is that the absence of controls and stops of any character worked this astonishing change. It is one thing to run a big racing car for 300 or 400 miles at a stretch at top speed without a stop, and quite another to run another race of approximately the same distance with stops that aggregate between one-third and one-half the total or elapsed time. This occurred in both the Paris-Madrid and the Bennett Cup race, while the Ardennes event was a continuous one. We feel sure that this, and not any sudden deterioration in tire qualities, is the cause of the disasters in the latter contest. It is, in fact, marvellous that the tires stand.

### Auto's Far-Reaching Influence.

There is a deal of romance and also a practical side of the scheme of that noble lord the Earl of Leitrim. The Earl proposes, nay, has already started, to take a certain section of Ireland and make its remotest byways and beauty spots accessible to the tourist, the golfer and the seeker for the truly rural. To attain this the Earl will lay down a new road system, and after this is accomplished he will operate an automobile service.

This is a most interesting departure, and every one will wish the Earl success in his novel plan. It promises new uses for the automobile everywhere. What the Earl has started to do for his particular corner of the Emerald Isle will in time be done elsewhere, in fact, wherever there is an extensive acreage of picturesque country. As civilization advances genuine natural beauty and the picturesque recede. Every traveller in a quaint place leaves a trace of the conventional and the worldly behind him. Thus, in time, rare spots—once sacred to the few—become the haunt of the many, and something is lost.

The Earl's scheme, therefore, has this feature: It will enable man to get out of the beaten way and push into the true haunts of

nature. It will, in fact, widen the sphere of activity, so to speak, as applied to the sight-seer, the traveller and the loiterer in the quiet place.

### These Speed Contests.

The Woonsocket (R. I.) Call typifies a certain section of the press which has been weeping over the Irish race and over its results, lamenting, in fact, the holding of the race at all, and despairing because the makers of American machines were foolish enough to be represented in it. This portion of the press decries further speed contests, insists that they are useless, and declares that they invite death, not only to the competitors, but also to the spectators.

This editorial body of decriers and weepers are altogether on the wrong tack. It is true that a motor is more liable to "fly to pieces" than to "hold together" when driven at a speed of seventy-five miles an hour or over. It is also true that parts of the car are liable to give out when sharp turns are made at the same speed, or when the machine runs over ruts, gullies, depressions and the like at the frightful pace necessary to try for honors in these great automobile road races. But that is just why these great contests are valuable. They are, in the finality, a public demonstration of what the draughtsman and inventor and the whole factory crew have done toward refining and perfecting the existing machines. They are to the trade of automobilism what the dress rehearsal is to the stage.

At all times the collective factory intellect is engaged in studying motor car mechanical possibilities. Many different types of men, each especially adapted to his own particular purpose, devote their time, day in and day out, to studying the domestic and foreign markets, to investigation of new devices, new applications of power, new shapes and many minor points for car bodies. In brief, day after day they experiment, accept, reject, refine, innovate, etc. At certain periods they say, "Here is the result," and these great public contests are held to try out that result. And certain it is that in these great flights of speed the structural and material defects are sought out; and is it not better to find out the weakest spots in the car through putting one example of it through a severe test rather than place a thousand of them on the market and then find radical weakness or radical error?

With the man who tries the car in one of these great events it is either a form of sport or he is highly paid for the purpose,

and in many trades and occupations men constantly do this thing. For instance, men stand year after year in front of emery wheels, and slowly but surely go to death, in order that they may make a bit more wages than their fellows who are filling healthier occupations under the same roof as themselves. And the trying out of one of these machines in the automobile road race is the same process in concentrated form. The chauffeur is willing, for high payment, to risk life and limb for a few hours, with the accompanying added impulse of applause and possible fame.

Nor do these contests at all mean that the manufacturers have become unsettled on the subject of speed, nor indicate that they have not consistently in their mind the building of comfortable, practical, beautiful and efficient motor cars. They regard these road trials, as stated above, as merely a part in the experimental work. The great steamers which plough the Atlantic at twenty-five knots an hour were modelled after toy boats which were first sailed round a bathtub. These toy boats were never intended to cross the ocean; they were merely the models of what the big liner was to be. And it is the same with automobilism. No practical man dreams for a moment that the highest aim of the maker is to turn out a car which can make eighty miles an hour. For among automobile users, and among those who hope to own motor cars, not one man in ten thousand would drive or permit himself to be driven on the public highways at this rate.

It is paralleled by the education of a great singer, who for years and years puts her voice through all sorts of crescendo and decrescendo. Year after year she strives to obtain the highest possible note consistent with purity and fulness. Yet in her after career on the stage she hardly ever utilizes this note, and when she strikes it it is regarded as a most unusual thing. And thus it is with automobilism. These contests are merely the last word, and the last word is the measure by which we gauge all that is and all that may be.

### Why the Horn.

Away back in the dark ages of the automobile—that is to say, four to six years ago—the bell was the favorite, almost the only, method of signalling. Users of the horseless vehicles seemed to fall easily and naturally into the habit of employing it. Its very name—gong or alarm—seemed to mark it out as the fittest device to employ for giving warning of the approach of an auto-

mobile. It was in general use on other vehicles. The fire engine, the patrol wagon, the ambulance, the trolley car, the locomotive—all announced their approach by means of loud sounding and insistent bells. What more matter of course, then, than that the automobile should also acknowledge the sway of the clanging bell?

But for several years the trend has been away from instead of toward the bell. Horns have usurped the place that once seemed reserved for them, and the more they are used the more they seem to be liked. Perhaps their oddity had something to do with this. Bells were common; everybody was familiar with their sound, and able, as a rule, to tell what vehicle carried them and how much attention needed to be given to the summons to "clear the way," how quickly it must be obeyed. So why not leave the bell to other vehicles, and, as the automobile is a new type, invent or press into use a new alarm device.

To be sure, the horn was not exactly new. For a decade or two it was familiar to bicyclists, having been largely imported from France and Germany for that purpose. But if not absolutely new, it was new to motorists, and they took to it eagerly.

To-day it seems to be practically the only signal in the running. Its strident sounds are heard wherever there are automobiles—and that is wherever there are people and roads—and no one needs to think twice or to be told once that an automobile is anchored behind the ear splitting sound. Certainly the horn serves its purpose—that of serving as the avant courier of the horseless vehicle.

Mr. La Roche has challenged Oldfield to a match race to be held on the Empire City track on July 25. This is a good start. How interesting it would be if there were half a dozen track fliers of Oldfield's calibre, half a dozen star motorists competing with him for the premier honors! At present it is Oldfield first, and the rest—well, almost nowhere. But this promises to be mended if La Roche and other men interested in the speed end of automobilism take up racing seriously.

The "boreens" were effectually blocked during the Bennett Cup race. Wherever they led into the course—for "boreens" are merely unimportant side roads—they were guarded by the soldiers, whose duty it was to see that no encroachments were made on the main highways during the race.

## TWO DIFFERING PROPOSITIONS

One From, the Other to, the Century M. V. Co.—Its Condition.

More complete reports show that the financial trouble that has overtaken the Century Motor Vehicle Co., Syracuse, N. Y., is a serious one and that the concern's affairs are very much involved. While no figures are yet obtainable, it is understood that the liabilities are in the neighborhood of \$36,000.

On Friday last a meeting of the creditors was held at the office of the Century Co. and a proposition was submitted to them. This was, in brief, to bond the company for \$35,000, to pay the creditors 20 per cent in cash and allot them treasury common stock for the remainder of their claims. Naturally, this did not appeal to those present. There is but \$37,500 of common stock in the treasury, and, besides, to accept this proposition would place the creditors, so far as the 80 per cent was concerned, on the same plane as the present stockholders.

It was suggested by J. L. Law, of the Garvin Machine Co., that a better plan would be to take an inventory of the plant and report the result at a meeting to be held this week. It was thereupon resolved that it was the sense of the meeting that the directors of the Century Co. be requested to submit to the creditors a plan having for its basis the payment of 20 per cent in cash and an extension of time for one year, with the company's notes for security.

### Ask for Foster Receiver.

Following upon the judgment by default obtained against the Foster Automobile Co., Rochester, N. Y., as related in the Motor World last week, steps were taken on Friday to have a receiver appointed for the concern.

The Alliance, Flour City National and German-American banks, of Rochester, made application in the United States District Court at Buffalo to have the Foster Co. declared a bankrupt.

The banks alleged that the company owed debts aggregating upward of \$40,000, of which about \$15,000 was due to the petitioners, and that the aggregate amount of the assets of the company did not exceed \$2,000. It was also alleged that Park Densmore, president and treasurer of the company, had abandoned the business and disappeared from Rochester.

### Claim and Counter-Claim.

In the Buffalo (N. Y.) County Court Dr. Julius H. Potter is suing the Conrad Motor Carriage Co. to recover \$800 for alleged breach of contract. He claims the automobile company agreed to furnish him with an automobile and keep it in repair for one year from the time it was delivered to him. He charges the contract was not carried out. The Conrad company denies making such a contract.

## Recent Incorporations.

Reading, Pa.—The Acme Motor Car Co., under Pennsylvania laws, with \$200,000 capital.

Philadelphia, Pa.—Dalsimer Automobile Co., with \$200,000 capital, to make and sell automobiles and bicycles.

New York, N. Y.—Pettie Tire Co., under New York laws, with \$50,000 capital. Directors—E. H. Ensell, W. M. Connell and Emma C. Pettie, all of Brooklyn.

Brooklyn, N. Y.—Ormond Automobile Co., under New York laws, with \$7,500 capital. Directors—H. A. Lyons, Wilfred Burr and R. W. Hoff, all of Brooklyn, N. Y.

New York, N. Y.—Broadway Garage Co., under New York laws, with \$3,000 capital. Incorporators—Charles T. Osborne, F. Williams Haenset and Robert F. Greacen, all of New York.

Buffalo, N. Y.—Queen City Automobile Exchange Co., under New York laws, with \$2,000 capital. Incorporators—J. Homer Betts, Fred F. Beck and Frederic C. Rapp, all of Buffalo, N. Y.

Washington, D. C.—The National Capital Automobile Co., under District of Columbia laws, with \$100,000 capital. Incorporators—Harry L. Wheatley, Chicago; James K. Polk and Freeman Field, Washington.

### Endurance Run Route Changed.

A change has been made by the N. A. A. M. in arranging for its endurance run to Pittsburg by way of Baltimore and Washington. It is now proposed to go to Cleveland instead, driving not by way of Albany and Syracuse, which was the route of the Pan-American run in 1901, but via Kingston, Binghamton, Elmira and Erie, with possibly a detour from Corning to Buffalo.

The change in route is proposed because it has been found that there is no town of a size sufficient to accommodate the several hundred vehicles and persons overnight between Hagerstown, Md., and Pittsburg. In case Pittsburg is retained as the destination, the route will probably be by way of Binghamton and Elmira to Corning, and thence via Jamestown, N. Y., and Franklin, Penn., to the Smoky City.

Secretary Harry Unwin of the association started this week in an automobile from this city to plan out the route of the contest, and at Kingston will receive definite instructions regarding his route beyond Corning.

Even yet the well aimed shafts of Cupid have not ceased to seek out susceptible automobile tradesmen. One of the most recent victims is C. W. Matheson, of the Matheson Motor Car Co., who is just concluding a brief wedding trip. He is expected back at his desk at Grand Rapids this week.

An electric runabout has been placed on the market by the Canada Cycle and Motor Co. It is styled the Ivanhoe, and is made at the company's Toronto plant.

## GENEVA'S NEW OWNER

Carter Steps Down and New Capital Goes in—Business to be Pushed.

A complete change of ownership took place in the Geneva Automobile & Mfg. Co., Geneva, Ohio, last week. Practically the entire stock of the company passed into the hands of Messrs. Fayette Brown, James Barnett, Frank A. Arter and Dexter B. Chambers, all of Cleveland. These are all men of wealth and high standing in financial circles in Cleveland, and propose to put the company on a firm financial basis.

J. A. Carter, who was instrumental in organizing the company, and has been its president and general manager since organization, has disposed of his entire interest and is about to sever his connection with the company.

The Geneva Automobile & Mfg. Co. has been in existence for several years. It has made several styles of steam vehicles, but changes in its patterns and other difficulties encountered prevented its making any material progress. For some little time past it was known to be in financial straits, and the present change in ownership will cause no great surprise. Of the new stockholders Fayette Brown was the vice-president of the company.

### Declared Final Dividend.

The trustees in dissolving the New England Electric Vehicle Co. on Saturday declared a third and final dividend of 26 cents a share, making the total dividend in liquidation \$3.76 a share. This third and last dividend is payable on July 15 upon surrender of the trustee receipts.

### Exide Depot Removed.

The Exide battery depot formerly located at 148 West Eighteenth street, New York, has been transferred to Forty-ninth street and Eighth avenue, and will hereafter be operated by the New York Transportation Co. at this address.

### Fire Damage at Philadelphia.

A fire starting on the third floor of the Thomson Automobile Co., 1 South Twenty-third street, Philadelphia, last week, caused about \$2,000 damage.

### Olds Traveller Here.

Among the visitors to New York this week are Roy Chapin, of the Olds Motor Works. Mr. Chapin is looking after his company's export interests.

### To Locate Here.

The Hoeffler-Berg Automobile and Arms Construction Co., of Dayton, Ohio, is said to be projecting a removal to South Jamaica, L. I.



## NEW WAY OF GETTING GOODS

**Neither Cash nor Credit Necessary if You Can Work the New Jersey Scheme.**

To kill a dog it is not necessary to catch hold of his jaws and risk being bitten in an attempt to twist his head off; neither is it necessary, in order to get goods for building automobiles without money, to run up debts and risk suits, receiverships and things, by establishing credit and buying on time, which it is sometimes difficult to do. There is a way known out in Jersey by which to get all the goods one wants laid almost at the doors of the factory without money and yet without running into debt.

It is a very "perky" scheme. Consider it, ye makers of parts and supplies.

Suppose you want to build a light gasoline runabout at a popular price—assembled to sell. You have a little ready cash, very little, and want to make it go a long way. You get out your sample and book some orders, and then you have money in sight, coming when you fill the orders. Now, to get the goods for assembling the machines to fill the orders! Why just go to a few parts makers, tire dealers and so on, and place a very small order, very small, you understand, "cash against bill of lading." When the goods arrive, take up the bill of lading, pay the cash and take the goods, even if it takes your last dollar. Then you are broke, perhaps, but you need not worry. Just go back to the same supply makers and order all the goods you want, "cash against bill of lading." That is not asking for credit; that is buying for cash, and your goods will be shipped.

When the goods arrive at your freight depot you cannot take them away, of course, by paying the "cash against bill of lading," but don't let that worry you. Let the other fellows do the worrying. The other fellows will not care to have the goods shipped back to them at their expense if they think there is any chance of their eventually getting the money for them from you, and you can easily make them believe this. So, meanwhile the goods will lie there, right at hand, ready for you to lay hold of as soon as you can turn yourself by selling the few cars assembled with the goods first bought. In this way, you see, you get the prompt attention of a cash customer and don't have to wait for your goods. You can go ahead without being delayed and get money in as fast as you can sell cars. You are doing business without asking for credit, without cash, and yet getting goods to hand awaiting your convenience. Isn't that "perky"?

If some concern should get impatient and put their claim into the hands of their lawyer, why what of it? As you have not taken their goods from the railroad and they are not in your possession, they haven't much standing as a creditor in position to sue or to apply for a receivership. Just explain to them that you have been delayed in getting

certain castings necessary to assemble some machines for which you will get the cash as soon as you can get them together, and that meanwhile you are temporarily embarrassed for ready cash, the same as many other good concerns are occasionally. Be gentle with them and they will let their goods lie awaiting your pleasure. If you are off in some little Jersey town you can fix it up with the railroad.

Of course, if the makers of parts "get on" to your scheme they may not jump at even your "cash against bill of lading" orders.

For exemplification of how much goods of different sorts can be piled up at a depot awaiting cash payment you might go over to New Jersey and in a certain town there look around. Do not go to Rockaway, Long Island, to see this thing. Go to a town in New Jersey.

### Pope Company Fully Officered.

Last week the directorate of the Pope Mfg. Co., which controls the Pope Motor Vehicle Co., was completed and now consists of the following: Wm. A. Read, Colgate Hoyt, F. S. Smithers, G. F. Crane, all of New York; Albert A. Pope, Boston; Albert L. Pope, New York; George Pope, Orange, N. J.; Charles Hayden, Boston; S. C. Winslow, Worcester, Mass., and G. T. Hollister, Rutherford, N. J.

At the last regular meeting the board filled the existing vacancies in the list of officers—Colonel Albert A. Pope having been made president some weeks ago—as follows: Albert L. Pope, vice-president; Colonel George Pope, treasurer, and Paul Walton, secretary.

### Lansing's Strong Company.

The National Electric Coil Co., \$20,000 capital, is the style of a new concern just organized at Lansing, Mich., where the plant will be located. The company will make electric spark coils after a device invented by E. P. Kinney. Certain automobile makers are undoubtedly behind the new company, for among the incorporators is Mr. R. E. Olds, general manager of the Olds Motor Works. The other incorporators are E. P. Kinney and F. E. Church, the latter representing E. W. Sparrow. The company will start with twenty-five men. Mr. Kinney will be the manager.

### To Make the Herschman Truck.

Announcement is made by the Columbia Engineering Works, Brooklyn, N. Y., that it will undertake the manufacture of the Arthur Herschmann patent steam wagons. An automobile department has been established and the shops equipped with additional tools especially adapted for this work. Two styles of trucks will be built, with three and six ton capacity, respectively.

The fine showing these wagons made in the recent commercial vehicle contest will be recalled.

General Manager L. H. Kittridge of the Peerless Motor Car Co. made a flying trip to Boston last week.

## CONTINENTAL CO.'S PLANS

**Big German Tire Concern Establishes Branch Here—Bid for American Trade**

Their steadily increasing trade with this country has led the Continental Caoutchouc & Gutta Percha Co. of Hanover, Germany, to take steps to conserve and still further increase it. To that end the Continental Caoutchouc Co. has been incorporated and offices opened in this city. The latter are at 298 Broadway, with Emil Grossman as manager, while the officers of the company are Willy Tischbein, president; Marcel Kahle, vice-president, and Jos. L. Kahle, treasurer.

The concern is a branch of the parent company, the stock being owned by the latter. In addition to looking after the trade already possessed—mainly, of course, arising from the fitting of Continental tires on German and French cars—a bid will be made right at the outset for the business of American automobile manufacturers. It is confidently expected that the great reputation and high standard of excellence possessed by these tires will commend them to automobile makers and users here. A full line of standard sizes, ranging all the way from 2½ to 5½ inches, is carried, and special attention will be given to large orders.

The Continental Co. and its products are too well known to require any extended description. The concern was formed in 1872, having only 100 employes at that time. Today there are 2,500 men on its payroll, the Continental tire is found wherever automobiles are used, and branch houses are located in all the principal countries of the world.

The winning of the Bennett Cup by a car fitted with Continental tires is the latest feather in this concern's cap, while the entire reliability of the tires, as shown in that contest, has again been strikingly demonstrated.

### Has a Light Runabout.

The Pennsylvania Electrical and Railway Supply Co., of Pittsburg, Penn., is reported to be about to place on the market a light runabout. It will be sold at \$550, and the weight is six hundred pounds. It is propelled by a 4½ horsepower, single cylinder motor, and has a tested speed up to thirty miles an hour. It is simple and compact. The transmission is positive and requires no adjustment.

### Scott Creditors to Meet.

A meeting of the creditors of the J. A. Scott Motor Co., St. Louis, Mo., has been called for July 27. It will be held at 10 o'clock in the morning in the office of Referee in Bankruptcy W. D. Coles, Room 416, Security Building, 319 North Fourth street. Creditors may attend, prove their claims, appoint a trustee and examine the bankrupt.

A 1904 pattern Autocar has made its appearance in Newark, N. J. It has been most favorably criticised.

## THE FRENCH VIEW

### Returning Irish Visitors Call Cup Race a Picnic —Light Cars had big Advantage.

Paris, July 3.—The impression of the French visitors upon the Gordon Bennett Cup contest may be summed up in the words cabled from Dublin to one of the newspapers here—"It is not a race, but a picnic." The Gauls have been so long nursed in the tradition that "the English take their pleasures sadly" that they were a good deal surprised to see the way in which the Irish were enjoying themselves over the prospect of an automobile race. With their usual method of generalization, the French lumped up all the inhabitants of the British Isles under the name of English, and ticketed them with the same character and temperament; but the visitors very soon discovered that generalizations of this kind are dangerous, and that there is very little sadness about the Irishman when there is anything in the way of sport on hand.

Not only was the race devoid of that seriousness which the French regard as the basis of British character, but they were struck by the ingenuity of the organizers and the inhabitants in making money out of the meeting. In this respect there is a vast difference between the British and French methods of carrying out races. The idea of allying the sport with business has never occurred to the French, and this is probably due to the fact that the races have been organized by rich and powerful bodies, who consider it a little undignified to look upon the sport as a source of pecuniary profit. Besides, even if they desired to make money out of the sport they would have found it difficult, if not impossible, to do so. It is doubtful whether the government and the local authorities would have consented to the erection of stands and the laying out of inclosures to which the public would be admitted by the payment of large fees, and so long as racing was tolerated on the highways it had to be carried out openly, when every one had equal rights to see what was passing on the road. It was, therefore, a singular experience for the French to observe the enormous stands and inclosures, and every available space along the course let out to spectators.

It is quite possible, however, that this may have a strong influence upon the future organization of automobile meetings in this country. Since they are to be confined henceforth to circular routes or to inclosed tracks, the cost of organizing races must increase enormously with the police arrangements in the one case and the renting of territory for the laying out of motor tracks in the other; and it is obvious that if races are to be carried out under these conditions a means must be found of covering expenses, for the entrance fees will be quite insufficient to guarantee the clubs against loss. The Irish meet-

ing has shown the Gauls that it is possible to make arrangements for a circular course nearly perfect. It is easy enough to provide the most ample security for the public, and consequently to reduce the risk of driving at high speeds to a minimum; but all this means a big expenditure of money, and, as it is not so unreasonable to expect the public to pay for the privilege of seeing a race under favorable conditions, it is quite possible that the experience of the Irish meeting will be turned to good account by the French organizers, who will make a source of profit out of racing on circular or inclosed tracks for the benefit of the sport generally.

Apart from the valuable lesson it provided in organization, the conditions under which the contest was run off were a great disappointment for the French. If a race means anything at all, it is a test for the fastest vehicles. The courses have always been mapped out on the Continent to admit of the cars travelling at the highest speeds, which, even on the best roads of France, with their magnificent stretches several miles in length, rarely exceed an average of 100 kilometres an hour. Unless it is possible to attain these speeds, the cars are not tested at all. It was therefore a little galling to the French to find, on going over the course, that it was impossible for two vehicles to pass at racing speed on the narrow road, and that, moreover, the turnings were so numerous and awkward that it was suicidal to drive cars at a greater pace than is done by fast touring carriages. A test under these conditions was not a race, because it was not a test of speed, but merely a trial of reliability and driving skill, in which those who had a perfect knowledge of the course had the greatest advantage.

The French saw at once that their calculations had been entirely upset. They had gone to Ireland with vehicles built for speed, but how could they show up to advantage when the maximum limit on such a road was only two-thirds of what the cars were capable of doing? In a word, the big French vehicles were handicapped by finding themselves with nearly double the power necessary for racing over such a course. So far as can be judged from the criticisms on the course published here the French would have done better by competing with light carriages of, say, 30 horsepower. They would be much handier for passing and taking the corners, and they would certainly have been capable of travelling at higher speeds than those to which the big vehicles were limited by the perpetual slowing down around the bends. As soon as Chevallier, René de Knyff, Henry Farman and Gabriel saw the course they confessed that they had little hope of winning. As events turned out, their prudent driving enabled all three to complete the course, and, if the cup has gone to Germany, the French, at all events, have the merit of being the only team to finish the race.

It is, perhaps, a fortunate thing for the Gordon Bennett Cup that the trophy has not remained in England. In that event it is to be presumed that, in default of any other

route, the British Club would have selected the same course in Ireland, and it may be taken for granted that the French would not consent to race again under such conditions. The competition would have lost a good deal of its international character, and it is possible that the British club would have been allowed to remain in undisputed possession of the cup. Now that the trophy has gone to Germany, we at least see a chance of another big struggle for it next year. Racing is prohibited in Germany, as it is elsewhere, but the government of Württemberg is said to be in favor of an exception being made for a Gordon Bennett contest, so that there is every prospect of the Fatherland being the scene of the next battle for the cup. As an alternative there is always the Ardennes Circuit, which would probably be selected for 1905 in the event of the trophy being carried off by the French team.

### 'Bus Line for Donegal.

Dispatches from Dublin state that the Earl of Leitrim has organized a Coast Line Motor Way, to provide automobile service for the northwest part of Donegal, Ireland. The new service is specially designed for tourists and golfers, and will enable them to penetrate into many new haunts and remote places which the traveller by ordinary conveyance never sees, because they are so far off the highways. Lord Leitrim, in order to make the service as perfect as possible, has planned a remarkable road repairing and road building system, at his own expense. The vehicles are to be very powerful, and will carry sixteen persons and half a ton of luggage. They are being built in Edinburgh.

### Pigeons Take a Back Seat.

Carrier pigeons, popularly supposed to embody the extreme limit of speed and endurance, now have to give way to the automobile.

The Melun Pigeon Club flew its birds at Avignon, France, last week, and they covered 373 miles in nine hours, or at the rate of nearly forty-one and one-half miles an hour, whereas automobiles have hit the speed up to eighty-two and one-half, while the cycling record is forty-six miles for one hour.

### Jenatzy an Inventor.

Jenatzy, the winner of the Bennett Cup race, figures this week among the patentees at Washington. A magnetic clutch and a new transmission gear are the devices upon which his inventive genius has been exercised.

### A Fitting Reward.

The Daimler Co., makers of the Mercedes car, have given Jenatzy \$25,000 and a new machine as a mark of their appreciation of his success in winning the race in Ireland this month.

Sumter, S. C., has a new automobile club, with H. J. Grover, jr., as president.

## LUCK AND PERSONAL SKILL TRIUMPHS.

(Continued from page 585.)

gave freshness to the rich green of the fields and hedges and made plain that this is in truth the Emerald Isle.

The course was a trying one, hard but narrow and full of curves, sharp turns and grades, some of them steep. It was, doubtless, the best that could be chosen, and afforded what appears rare in this country—several straight stretches of a mile or more. It must be that a surveyor reeling in his cups laid out those Irish roads. They stagger from one side to the other half a dozen times in a mile, and twist and turn in amazing style. They must be seen to be appreciated. To describe them as serpentine is not

and traversed the eastern circuit via Carlow and Athy to Ballyshannon Cross Roads. From this point they ran to Kilcullen, thence across the Curragh, a plain, to Kildare, and thence via Monasterevan, Ballydavis, Stradbally and Athy to Ballyshannon, where the circuit was completed.

After the Paris-Madrid calamity the Automobile Club of Great Britain and Ireland sacrificed everything to safety, and not only was the deed of gift which requires that competitors be dispatched two minutes apart stretched to seven minutes, but a "block system" of controls was arranged specially with a view of preventing competitors passing each other at speed on the open road.

Carlow, Castledermot, Athy, Kildare, Mon-

hours 36 minutes 9 seconds, he really did not finish until 10 hours 18 minutes 1 second after he was given the word "Go."

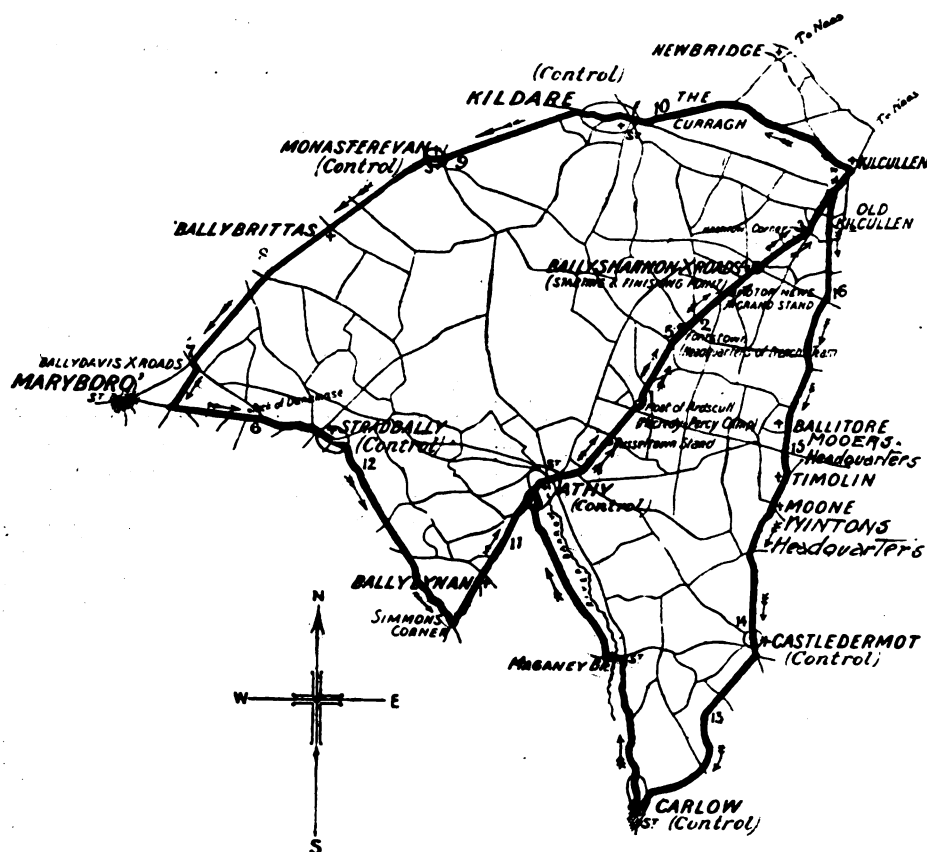
Let the whole truth be told. The race was not of absorbing interest. It was a series of sprints bunched—a race against not one, but many watches. Except for the—shall they be termed favored few?—who witnessed the accidents to the contestants or the overtaking of one by another, the race was absolutely devoid of excitement. It was of real interest only to the spectator who, with watch and pencil, kept note of the time of each car's passing. He only could tell who had gained or lost ground or passed a competitor, and, of course, not with any considerable degree of accuracy. It was a self-satisfying task and far better than absolute ignorance. But the men who did this sort of thing were few and far between and of prime assistance to their neighbors. Many of these men and the very many other spectators who did not know the competitors were confused by the change made in the order of starting the latter. According to programme, Winton was No. 3, Owen No. 7 and Mooers No. 11, which meant that they would start in those positions. As a matter of fact, Owen was No. 3, Mooers No. 7 and Winton No. 11. Similar changes were made in the other teams. As a result, there was some confusion and amusement. It was funny to hear "knowing" individuals address Owen as "Mr. Winton" and Mooers as "Mr. Owen." It was not so funny, nor is it strange, that newspaper reporters also confused the men and printed stories that make the real truth appear weird.

The men started in this order, and at the following times, Winton excepted:

S. F. Edge, Great Britain, 40 hp.	
Napier .....	7:00 a. m.
René De Knyff, France, 70 hp.	
Panhard .....	7:07 "
Percy Owen, America, 40 hp.	
Winton .....	7:14 1-5 "
C. Jenatzy, Germany, 60 hp.	
Mercedes .....	7:21 "
Chas. Jarrott, Great Britain, 40 hp.	
Napier .....	7:28 2-3 "
M. Gabriel, France, 70 hp. Panhard .....	7:35 "
L. P. Mooers, America, 80 hp.	
Peerless .....	7:42 "
Baron De Caters, Germany, 70 hp. Mercedes .....	7:49 1-5 "
J. W. Stocks, Great Britain, 40 hp. Napier .....	7:56 "
Henry Farman, France, 70 hp. Mors .....	8:02 2-5 "
*Alex. Winton, America, 80 hp.	
Winton .....	8:10 "
Foxhall Keene, Germany, 60 hp. Mercedes .....	8:17 "

\*Started forty minutes late.

Winton was actually given the word at the time stated, but at the moment and for more than an hour before he had been endeavoring to locate the cause of trouble that enabled him to use intermittently but three of his eight cylinders. He merely pushed his car to the side of the road and continued working, finally removing the carburetter and dissembling it. He had originally attributed his trouble to watered gasoline, but he did find some grit in the carburetter. As



THE 374 MILES OF SINUOUS COURSE.

a fanciful description; it is literal. On the route from Dublin to Ballyshannon Cross Roads there is scarcely a quarter of a mile of straight road.

As the map shows, the route of the race roughly represents the figure 8, being made up of an eastern and western circuit, with a common centre line. The eastern circuit measures forty-five and one-quarter miles, the western fifty-eight and three-quarters. Total, 104 miles.

The race comprised three complete circuits of the figure 8, and then an additional loop of the western circuit. The mileage thus is:

Three times round figure of 8..... 312  
Once round western circuit..... 58¾

Total miles..... 370¾

The cars started at Ballyshannon Cross Roads, ran to Old Kilcullen, turned right

asterevan and Stradbally were "controls," and no racing was allowed within their confines. Each car raced up to the inward control and stopped, its time being noted by the officials. Paced by a bicyclist, it was then allowed to traverse the control area at about fourteen miles an hour until the outward station of the control was reached. Here its time was again taken, and it was free to speed once more. It was sought to maintain an interval of three minutes between the cars leaving the controls. Thus, if two cars arrived within one minute of each other, the second was not sent away again until two minutes after the start of the first arrival, the times spent in the control being deducted, of course, from the gross or elapsed time. In all, the rules required that 3 hours and 21 minutes be spent in the controls, regardless of other considerations necessitating longer stops. Although Jenatzy's net time was 6

was cabled the Motor World, however, it is known to a certain few that the day before the race about a pint of lubricating oil was, by mistake, poured into the gasolene tank. The mistake was discovered by the man who made it, but one higher in authority assured him that no harm would result—that the gasolene would quickly "eat up" the small quantity of oil. Accordingly, nothing was thought of it or said of it until Winton's trouble became known. Then ensued grave concern that the "oil" episode was at the root of the thing and it was made certain that the American had been undone by his friends—for friends they are—after months of hop-

B erlike; it is thick enough to be the envy of a mattress maker. Jenatzy is neither big nor little nor broad; he is sparsely built, and his hair is red; his whiskers are a more vivid red, through which the wind appears to have whistled too vigorously. On the side of his face they sprout, in tufts; on his chin they hang stiffly, like two short horns. The thumb on his right hand is missing, making his command of the steering wheel the more remarkable. Were Jenatzy a comedian on a comic opera stage, he would not require a great deal of "makeup." Each of the English team represented typical English types. Stocks, stocky and serious; Edge

wearing his usual "What t'ell!" air, the most nonchalant and unconcerned man of the lot. All of the others were serious faced, some of them almost anxious. Some of the chauffeurs or mechanics were, if anything, graver than the principals. Owen's attendant was drawn like a drum, and ashen to the very color of death itself.

Of the cars the dark blue, boat-shaped Mors was easily the most striking; when the exhaust was thundering and the smoke belching upward the shape of the body acted as a funnel and it appeared as if the men were being steamed in an oven or tub on wheels. Winton's low, long, flat-prowed,



OWEN, AMERICA, AT THE ATHY CONTROL.

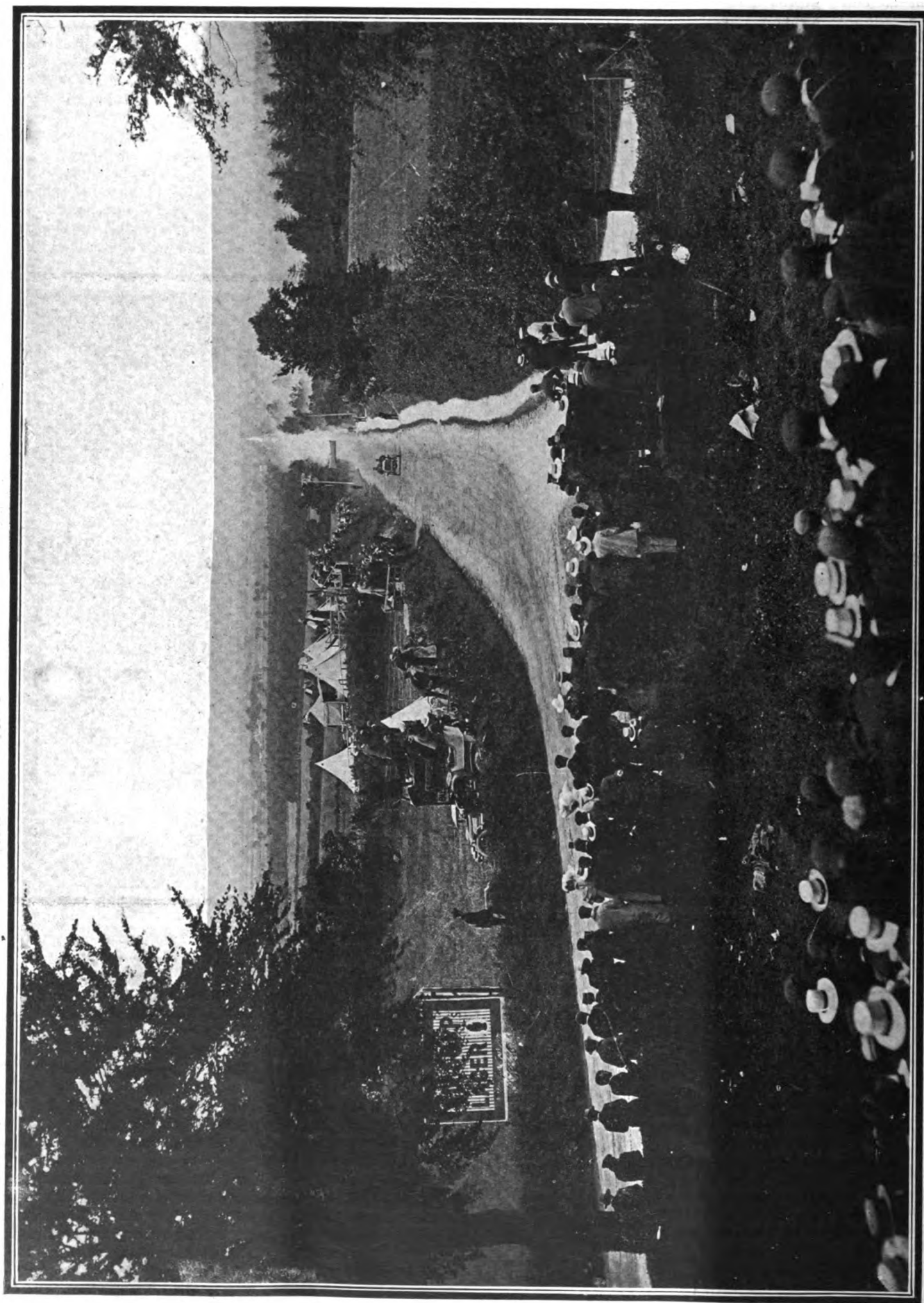
ing and planning and expenditure of time and money on both sides of the ocean. The story is not generally known—in fact, the Motor World representative is the only pressman "in the know," and there is no shadow of doubt regarding its truth. The men involved are known, but the unwitting manner in which the truth came out makes it unfair to name them. When Winton finally got going he was already forty minutes to the bad, and his motor was "skipping" frightfully and propelling the car in jerks.

At the starting point it was possible to "size up" the men and the cars. Of the former, Janatzy and De Knyff were easily the mer, Jenatzy and De Knyff were easily the incidentally, their performances fairly upset the "proverb" that whiskers retard speed—but their whiskers are as different as the men. Both are about forty-two. Dr Knyff is big, broad, dark, and his black beard is

taller, leaner and cadaverous; Jarrott stocky and with a face conveying the idea that he at least might laugh at a joke. All wore green caps—green was the English color for the day. Gabriel looked the round faced, jolly young Frenchman. The knowing ones tipped him as the winner—a devil-may-care lad, who would as soon drive over a stone fence as around it. Baron De Caters, dark and dapper, looked the Belgian baron that he is, while Foxhall Keene, the American member of the German team, tall, dark and loose jointed, might easily have passed for an Englishman. Percy Owen, the littlest fellow of the twelve, rosy cheeked and cherubic, must have been the "ladies' darling." Alex. Winton was Alex. Winton, calm, deliberate, imperturbable despite trouble that would have made most Americans turn the air blue or most Frenchmen paw the air and tear the hair; and Mooers, sunny, auburn haired, and

eight-cylindrical car was suggestive, while Owen's little racer was conspicuous because of its size. Compared with the others it appeared a Shetland among Percherons. The big Mercedes cars, painted a dirty white, were not lovely to look upon, but looked the seasoned "war horses" that they proved to be. They had been driven from Cannstadt across Germany and France and driven hard and very much faster than prescribed by law—usage that had developed and corrected weak spots. If weak spots existed. They were not the racing cars designed for use in this race; those really were destroyed when the Mercedes factory was levelled by fire. The ones employed were merely touring cars extemporized for the occasion, and one of them—the one used by Jenatzy, as fate would have it—was the property of an American, Clarence Gray Dinsmore. Mr. Dinsmore, although an





VIEW FROM ARDSCULL MOAT WHERE MACREDDY-PERCY CAMP WAS LOCATED.

DE KNYFF ASCENDING HILL.



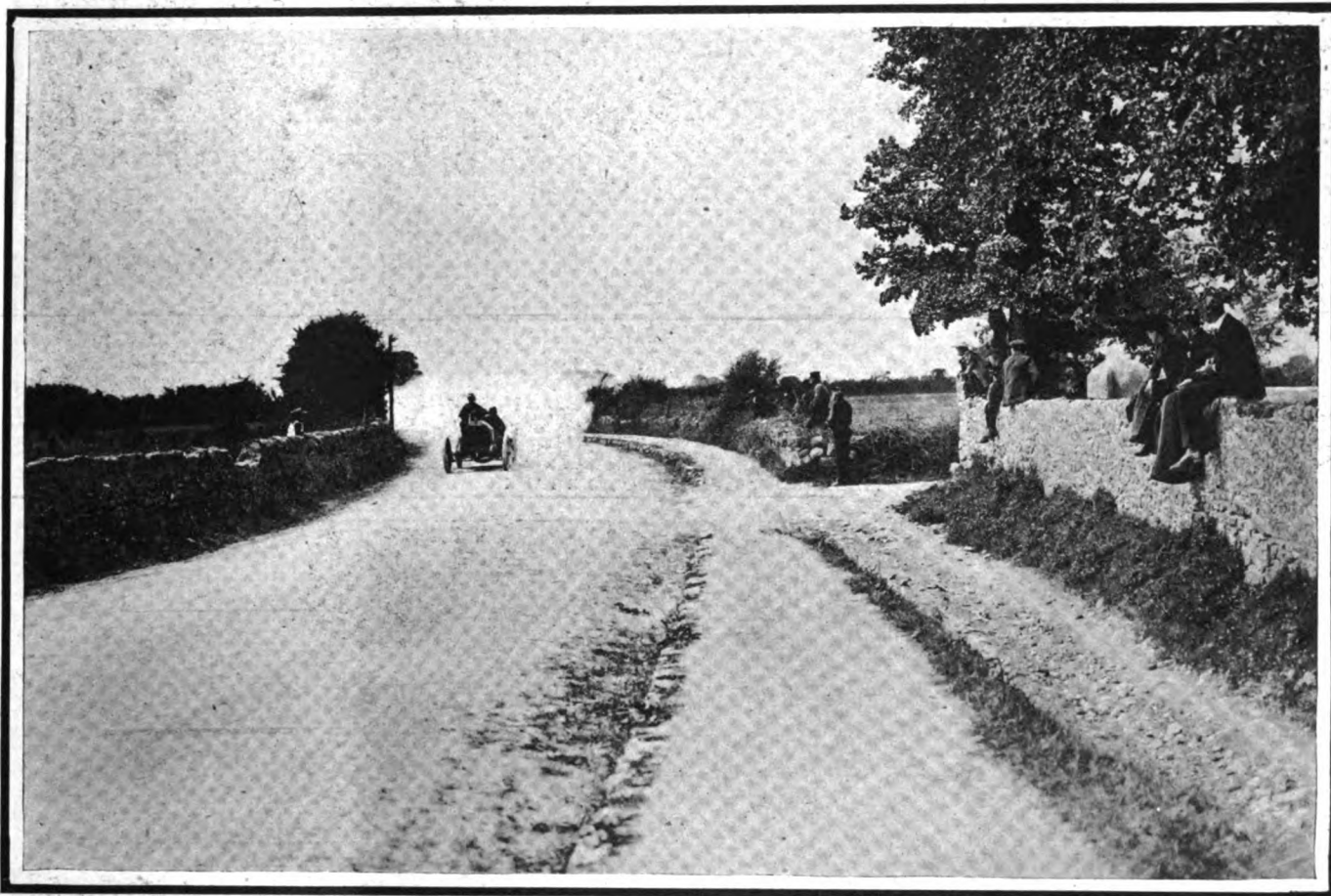
American, resides in Paris; but not even its makers can be quite partisans of the German car. Mr. Dinsmore is the American delegate named to represent the United States on the Cup Committee, and, queer turn of fortune, it was his car that enabled another country to win the cup. Mr. Dinsmore was present at the start. He shook hands with each of the Americans, wished them success and gave to each a tiny American flag to which was attached a tinier Catholic medallion. When the victorious Jenatzy arrived, Mr. Dinsmore was first to wring the hands of the excited and radiant Belgian.

But two incidents marked the start.

unlike the click click of a distant railway train, could be heard. Sharp ears would remark it; the word would pass. "Car's coming," would be shouted. Droning or drowsing spectators would suddenly become animated and rush to the roadside or as near to the roadside as hedge, fence or police permitted. Then they would stretch their necks or strain their eyes. The man with field glasses would glue them to his optics. He would see a small speck moving toward him. It does not appear to be moving swiftly. (It is odd how deceptive glasses are as regards speed at a distance.) The rattattoo is growing louder, nearer. The speck is growing larger. It is leaving a whirling cloud of

say three hundred. It has passed. The tornado of dust which swirls in its wake hides it from view. The roar grows weaker, becomes a punctuated thunder, volleying, peppering, a rattattoo, then a click, click, in the far distance, then faint, fainter, fainter. Then it ceases. The crowd buzzes. Then relapses into a drowse.

If at or near the starting point the dust of this picture was lacking; the road was oiled. A steam whistle a mile away would give warning of the car's approach, and the electric timing apparatus would do its work of measuring the speed over this oiled mile. Few of the men but were not timed this flying mile in better than one minute—Ga-



SWEEPING AROUND A CURVE, LEAVING A TORNADO OF DUST BEHIND.

Mooers could not get going, and his easy air gave way to a puzzled one until some one shouted, "Release your brake." He did so, laughed and darted off. Foxhall Keene stopped almost as he started; his chauffeur started the engine again, but had not got into his seat when it stopped once more. A workman in overalls jumped out, gave the crank a vigorous turn and the big German car ran the batteries of clicking cameras and was soon "volleying and thundering" in the distance. As each man started he was greeted with well diluted cheers. The crowd at that point, nearly half of whom were ladies in automobile garb, may have been an interested one; it certainly was not enthusiastic.

Of the race all that any one saw was this many times repeated:

In the far distance a faint rattattoo, not

dust in its wake. The speck becomes a motor car. "It's Edge." The noise becomes a peppering, a volleying. It comes nearer. It becomes a dull roar—punctuated thunder. Glasses are removed. Unaided sight now serves. The roar is louder. The dust heavier. The speed (apparently) greater. The car is fairly hurling itself down the road. It leaps from the road. Its speed is terrific. The man at the wheel looks little like a man. He is bent forward, his goggled eyes glued on the road, his cap drawn down to meet his goggles. His big, loose coat is distended at sleeves and back like huge air bladders. The man at his side is crouched low as if in mortal dread. At the moment of passing the speed is frantic, frenzied, demoniacal. It scarce seems earthly. The wonder is that man can safely guide a car at such a shuddering pace one mile, not to

briel in 52 seconds—69 miles per hour—the swiftest of the day.

The spectacle is impressive, wonderfully so, but it is not sport, the exciting, hair-raising, heart-stopping struggle of two men or more for leadership in sight of their fellows; that really stands for sport—that is called a race. In this cup race the winner was never in front. Odd sort of sport, odd victory, eh? On second thought, it is not so strange that the Irish people did not turn out in greater numbers to view the race.

Once, early in the race, the crowd at Ballyshannon was treated to a real taste of sport and fairly quivered with excitement. It was at the end of the first round. Two cars were discerned approaching. As they came nearer it appeared as if a great bird was swooping down on a smaller one. It was Jenatzy pursuing Owen. In forty-five



FILLING DeKNYFF'S GASOLINE TANK.



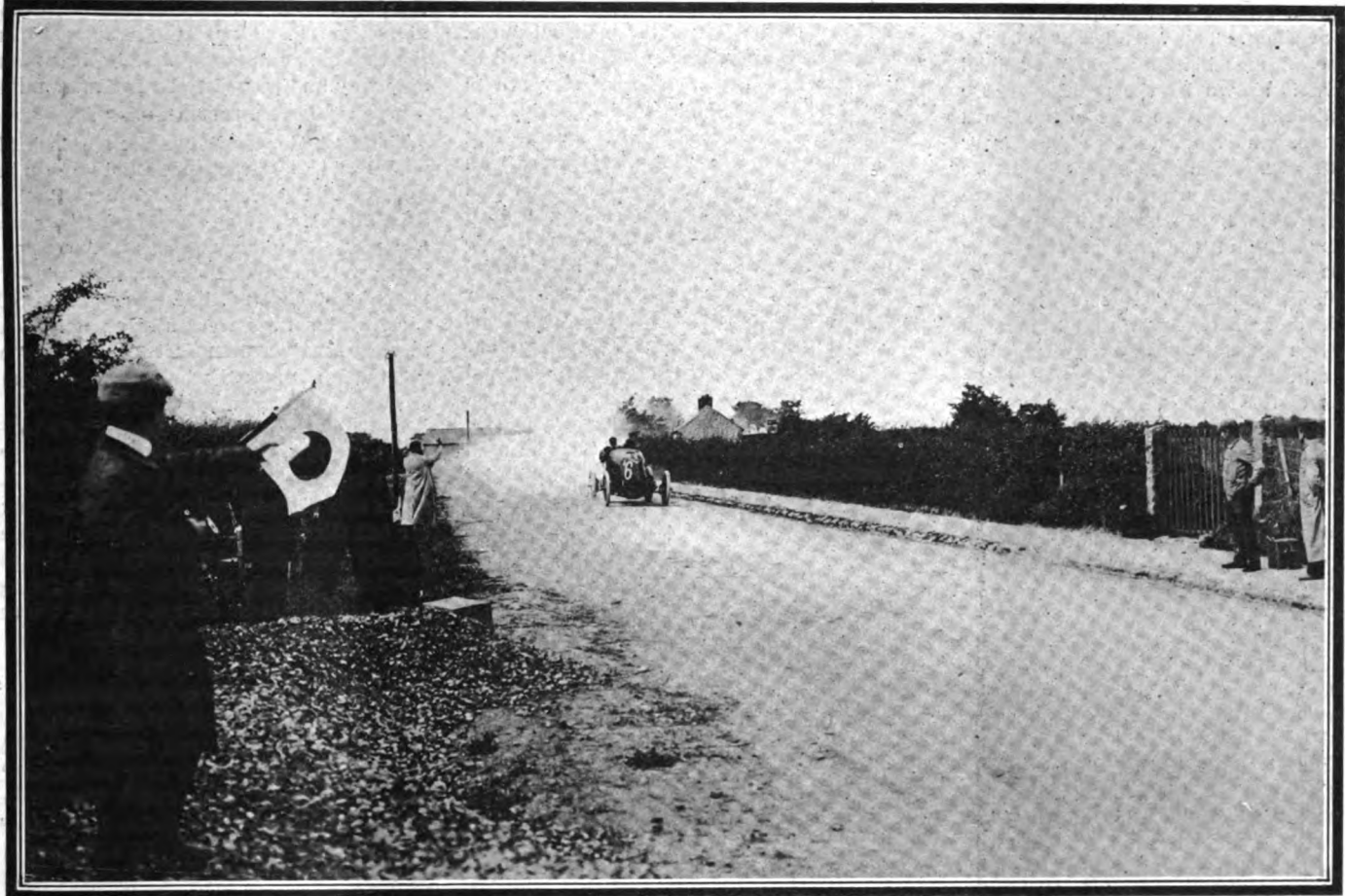
DeKNYFF IS INTERVIEWED BY A REPORTER.

miles he had cut down the American's lead of 7 minutes. As they plunged past, Owen's motor beating a sharp, spiteful defiance and the German's baying quick and deep—ah! that was a race, and the crowd knew it. Nerves tingled, hearts throbbed, voices shouted. The sight was thrilling, but all too short. Jenatzky trailed Owen for three miles before he passed him. Then Owen drew over to one side, the big German car fairly bounded past him, hubs clearing by inches only, so narrow was the road, and Janatzky rushed ahead, burying the little red car in a cloud of dust.

Stocks was first to come to grief. On the

Edge kept hope alive, and, oh! how the Britons "rooted" for him. They could scarce talk of any one else. The first man to start, he had led the way at "a jolly fine bat," as one of his countrymen expressed it, for two rounds, and though the men with pencils knew that he was slowly losing ground the fact that he was in front was indeed solace and stimulant. Then De Knyff wrested the lead from him and he fell on evil times. Puncture followed puncture. He had five of them, requiring tire or tube replacements, and paid the penalty of using 3¼ inch tires when all others used 5-inch ones. He also lost the belt driving the fan of his radiator, and his

two hours longer where they had already remained for from thirteen to fifteen hours. Owen was two laps behind and happily spared them this infliction. He drove to the finish and announced his withdrawal, and a few moments later, or at about 7:25 p. m., the car bearing the welcome sign, "Race Over," was dispatched over the course, the police relaxed, the roads were thrown open, and then began the homeward scurry. Owen's troubles were due to tires and to the heating of his engine. Winton, as already stated, was put out of the reckoning before he started by gasoline and carburettor troubles. After starting and after many miles of mis-



SIGNALLING GABRIEL TO SLOW UP AT A CONTROL.

first time around he failed to round a sharp turn at Ballymoon and ran off the road and into a wire fence stretched across a lane. He struck the post and his car was ditched and injured, and he was heard from no more. Stocks himself escaped unhurt.

De Knyff and Forman also failed to negotiate the same turn, and ran off the road and into the lane, but without mishap.

On the next lap Jarrott also was put out of the running. On Danamase Hill his steering gear went wrong and he lost control of the car. It swerved into the ditch, capsized and was smashed. Jarrott was pitched clear of the wreck, but his chauffeur was pinned underneath. Alarming reports swept the course, but Jarrott suffered only a dislocated collarbone, while his man sustained only cuts and bruises, severe and painful, but not serious. This early weeding of the English team cast a damper on English spirits, but

water foamed and boiled and, as a result, overheated his engine; it sent out clouds of steam which flew in his face and scalded him. The day before, when the cars were being weighed at Naas, and when Mooers was having trouble taking off twelve pounds to get inside the limit, Edge was looking on and was overheard to remark: "Serves him right for trying to cut it so fine." His tire troubles induced thoughts of the same nature. He managed to finish, but it was so long after the others that he had been almost forgotten.

The American team was never a factor. Percy Owen did the best work of the trio, but it was nothing to boast of, although he might have finished had he so desired. Had he done so several thousand people, not to say police and officials, would have been denied the use of the roads and have been required to stand tired and listless for perhaps

fring, during which his car slewed badly, all troubles disappeared and for a while it ran grandly, giving an exhibition of what might have been. Then the carburettor balked again, the engine heated and Winton retired. Mooers, as had been freely prophesied, ran into trouble before he had completed a lap—but not the sort of trouble anticipated. He was expected to go to smash turning a corner, but a tire which came off the rim was the cause of his undoing. It slewed his car off the road and, fortunately, onto a hedge, thus avoiding a smash or an upset. The accident stripped one of his gears, but the damage was repaired and Mooers dashed past the Ballyshannon control in fine style, although it had taken him more than three hours to complete the forty-five miles. Near Athy the tire came off again and the Cleveland man "chucked it" then and there. He replaced the tire and created a sensation by

giving no heed to the cries and signals and dashing at top speed through the Athy control. It was not known that he had quit and his action caused considerable tumult. He went straight to his quarters at Ballitove.

#### GERMANY AND FRANCE STRUGGLE.

With the British and American teams "dead" or limping, the duel between France and Germany took on new interest. The man who "kept tabs" could easily discern that, viewed from the clock, it was a nip and tuck struggle between De Knyff and Jenatzy. Keene completed the first lap of forty-five miles in the fastest time, 1:23:03, but then fell away, and on the third round, discovering a broken axle, he quit in season to avoid accident. The worthlessness of the uncorrected figures bulletined on the official blackboard is shown by the position of De Knyff and Jenatzy. According to the board the German, who started 14 minutes after De Knyff, gained some 15 minutes on the first four laps, and should therefore have passed him and been in front. As a matter of fact, nothing of the sort occurred, the Frenchman, after passing Edge early in the day, never being headed. But Jenatzy, like all who held watches, knew that if he was not first in respect to position he was first in point of time. When he stopped at the Athy control for the last time he was told how he had gained and, grinning all over, he pulled his cap down and went off at what seemed a more frightful pace than before, seemingly bent on overtaking the dying Frenchman in front. But he was unequal to the task and De Knyff, his beard parted by smiles, finished first at 5:34 o'clock p. m. Two minutes later, when the warning whistle blew, all knew it heralded Jenatzy's approach. He came like lightning; when fifty yards from the imaginary tape he slowed up, threw up both hands and, grinning all over, he waved them above his head in childish delight, unmindful that he had not yet crossed the line. He had almost stopped before he realized the meaning of what was being shouted to him from all directions and by friends and officials who crowded around his car. When he was made to understand, he quickly picked up enough speed to propel him the short distance necessary to win the Bennett Cup for Germany. De Caters, his surviving team mate, had hard luck when halfway home on the last lap. Previously he had been delayed by a hot engine, due to the water boiling and a cool supply not being at hand, but he was put out of the race by running into a ditch, which upset his car. He walked into Athy dejected but uninjured.

#### FRENCH TEAM'S TROPHIES.

The French team, if it failed to secure the chief trophy, did not go empty-handed. The Scott-Montague Trophy, offered for the best team showing, went to France. Every member of its team finished. One German and one Briton were the only other survivors. De Knyff attributed his failure to win to a broken waterpipe.

"It lost me eight minutes—just about the difference between Jenatzy and myself," he

remarked rather ruefully when questioned by the Motor World man. The remark is, however, a few minutes' wide of the real fact, Gabriel's motor worked fitfully; he covered at least two laps with but two cylinders working.

Camille Jenatzy, the winner, as has been stated, is a Belgian, not a German, though he formed one of the German team, on which, in truth, there were no Germans. His home is in Brussels, where he has a wife and two daughters. He is an engineer by graduation, "a gentleman" by choice. He has no need to work. His father is a wealthy engineer, and Camille, despite his years, is still "papa's boy," whose fad, automobiling, is indulged to the full of the paternal purse. Jenatzy has been prominent in nearly all of the Continental races, finishing eleventh in the sad and short-stopped Paris-Madrid. He has designed and constructed several fast cars of his own, his "Jamais Content," an electric freak, being one of the earliest and best remembered. He cannot speak a word of English, but, through Mr. Dinsmore, he told the Motor World man that he had had absolutely no trouble during the race. Motor and tires had behaved flawlessly and he himself, although taking every chance that offered, had not made a wrong turn or had the semblance of an accident. He was much worked up over the false report in a Dublin paper that he had run into a child, and used his mouth and his hands excitedly to assure the American reporter that the story was untrue and that he had run into no one.

#### FEW AMERICANS PRESENT.

Americans at the race were not numerous. Most of them met at Naas the day before the race. Naas is twenty miles from Dublin and is the first considerable town between that city and Ballyshannon. The cars were weighed there. Winton and Owen and Mooers were on hand, of course, with H. B. Anderson, one of the mechanical heads of the Winton factory, close by. Mooers's "mentor," W. J. Morgan, who came from New York on twelve hours' notice, and H. W. Starin, who rode with Mooers in the race, were likewise there. Harry D. Corey, the Boston broker, contrived to be present, and when Percy Owen admired the goggles he wore he promptly removed them and forced them on the dapper little New Yorker. W. E. Metzger, of the Cadillac Automobile Co., and F. E. Castle, of the Twentieth Century Lamy Mfg. Co., drove from Dublin with F. W. Peckham, a former Buffalonian, who is now selling automobiles successfully in London. It was Mr. Peckham's flag-bedecked Winton that was responsible for the outburst of Irish enthusiasm yesterday. He had as his guests Mr. and Mrs. Metzger and

Mrs. Castle, also a guileless young man from the Motor World office in New York.

The story of the Bennett races is an oft told tale, but it is worth telling once more, for all that. Until this year a hoodoo has seemed to pursue the event, the 1900, 1901 and 1902 races having been disappointing in many respects. Not until the present year has the race been a truly international one, and the results hitherto, as regards speed and durability, compare badly with those attained in other races. In cases where the Gordon-Bennett course coincided with that followed in open races, cars were found in the latter competitions to travel at much higher speed. Even stable companions of the Cup cars outdistanced them in a remarkable way and proved to be far more durable.

#### THE INITIAL RACE.

The first Gordon-Bennett race took place on June 14, 1900, the course being from Paris to Lyons. France had a team of Panhards, driven by MM. Rene de Knyff, Charron and Girardot. Winton raced for America, Jenatzy represented Belgium, and Edge appeared for England, but was not allowed to race, as his tires were alleged not to have been of English manufacture. Victory was secured by Charron, who average 38½ miles an hour. Only two cars finished.

In 1901 the course lay from Paris to Bordeaux. France put in a team of two Panhards and one Mors, and England sent Edge as its sole representative. In the race every car but Girardot's Panhard broke down, and he only accomplished an average of 39½ miles per hour, though a Mors car in the open race, over the same course, and on the same day, averaged 53½ miles an hour.

#### HOW EDGE WON.

The race of 1902 was disappointing also. With his indomitable pluck Edge challenged for England, and stood in with a small Napier against the very powerful Panhards and Mors. The entire French team broke down, and Edge finished alone. But he only averaged about 34 miles an hour from Paris to Innsbruck, whilst a Renault car, travelling from Paris to Vienna, more than double the distance, averaged 44 miles per hour.

The average speed in a Gordon-Bennett contest did not until this year attain 40 miles per hour, and there has never been anything like a close finish. But Jenatzy's remarkably even running and absolute freedom from accidents brought the time up to 56.1 miles per hour, faster than anything that has yet been accomplished in a Cup race, although a long way behind the 66 miles an hour made in the interrupted Paris-Madrid race. The complete record for the four races is as follows:

Year and course.	Miles.	Winner.	H. P.	Driver.	Average speed.†
1900—Paris to Lyons.....	354	Panhard .....	24	Charron.....	38.5
1901—Paris to Bordeaux.....	328	Panhard .....	50	Girardot.....	39.5
1902—Paris to Innsbruck.....	325	Napier .....	40	Edge.....	34.0
1903—Ireland .....	370½	Mercedes .....	60	Jenatzy.....	56.1

†Average speed in miles per hour.

R. G. B.



## IRELAND'S WIND UP

Cars Contest on Mile Stretch in Phoenix Park  
In Presence of Enormous Crowds.

Dublin, July 4.—All day long an almost level mile stretch in Phoenix Park, and the grassy hillocks and park lands that line it, was the scene of the automobile and motorcycle contests and trials that had been planned as a fitting windup to the Gordon Bennett race. Starting at 8 in the morning, there was a succession of heat after heat of one mile standing start motor car competitions, the one rapidly following the other until genuine ennui and satiety were produced.

You see, there was nothing startling to see or hear. The cars were lined up two abreast and sent away in monotonous sequence, interesting only to the men engaged in judging and clocking. There were no stars, no freaks, no records, nothing out of the ordinary. But there was an enormous crowd, an inclosure for royalty and the biggest and smartest turnout of automobiles that Britain has ever seen. In fact, the picture, rather than the events, was the main thing. I will not bore you with the two score trials, which would have no interest to Americans, but merely summarize the finals. Density and general bedevilment marked the official end of the affair; no results announced, numbers of contestants changed, telephones not working, no megaphones, no bulletin boards, no anything. My mind instinctively recalled the function so beautifully run off at Staten Island in May, a year ago, by the Automobile Club of America. That was perfection; this Phoenix Park affair was dull chaos.

Finals: Tourist cars costing \$1,500 and under—First, E. T. Baker; second, Dr. Edward Lehwiek. Time, 2:30. Tourist cars costing \$1,501 to \$3,249—First, J. T. Overton; second, Alec Gordon. Time, 2:10 1-5. Tourist cars, \$3,250 to \$4,999—First, Douglass Bell; second, C. W. Hocking. Time, 2:13 2-5.

R. G. B.

## Now Goes by Auto.

James B. Dill, of East Orange, N. J., one of New York's forensic luminaries, started on Wednesday morning on an automobile trip to his summer place at Rangeley Lakes, Maine. He was accompanied by his three daughters, an expert machinist, maids and his valet. Winthrop E. Scarritt, of East Orange, vice-president of the Automobile Club of America, will also accompany the party as far as Boston. The route will be through the White Mountains, and the distance to be covered is more than five hundred miles.

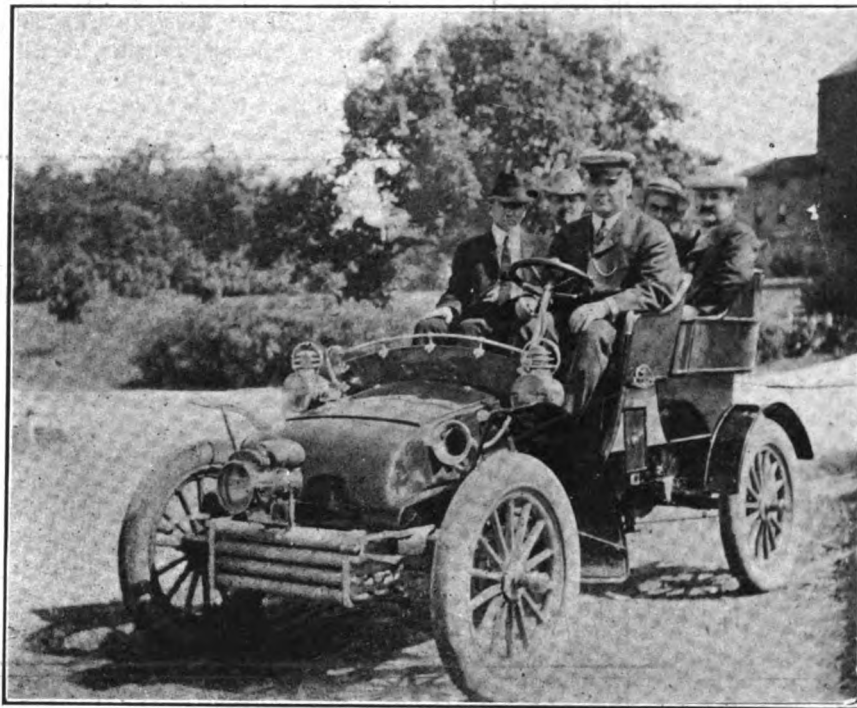
Mr. Dill has made the trip to Rangeley on horseback, but this is his first automobile excursion. He is driving his new White and one of his daughters operates a new White gasoline touring car, which accommodates five people. A White steam Stan-

hope is driven by the mechanic and used to carry the luggage and tools.

Mr. Scarritt travels in his White steam car. The outfit is the largest of a private nature, to start on a trip of such length this year.

## 'Round the Falls.

A jolly crowd of tradesmen was gathered in without any very great difficulty by the energetic Ezra E. Kirk, of the Kirk Mfg. Co., Toledo, Ohio, at Niagara Falls last week and made to sample the good points of a Yale car. The illustration shows W. S. Gordon and W. H. Pirrong, of the Standard Welding Co., and E. E. Kirk and J. R. B. Ransom, of the Kirk Co., just as they are



about to start on a trip around the Falls. The car was one of two that the Kirk Co. placed at the disposal of the attendants at the convention of the National Cycle Trade Association at Niagara Falls last week.

## Moriches, First Catch.

The revenue of East Moriches, Long Island, has had its first "take" under the operation of the new Bailey law. On Sunday, July 5, Mr. Alken, a New Yorker, was arrested for crossing the East Moriches dam at a rate exceeding four miles an hour, as provided by the law. He admitted that he had exceeded the limit, and was fined \$10. Thomas McGowan, no address, was fined \$20 for the same offence; total "take" for the day \$30.

## Pittsfield's Idiocy.

Pittsfield, Ill., is the limit. No city, town or village can hope to equal it for blithering idiocy. Its Town Council has passed an ordinance limiting the speed of autos to three miles an hour within its august limits! Brave hearts!

## CHALLENGE FOR OLDFIELD

## La Roche to Compete With the Premier American Chauffeur on Empire City Track.

F. A. La Roche, of New York, has accepted the challenge of Barney Oldfield, who is the acknowledged champion operator of America, and the pair will meet in a special match race at the Empire City track, Yonkers, on July 25, in connection with the regular automobile meet that is to be held on that day. The race will be best two in three, five-mile heats, starting from opposite

sides of the track. Mr. La Roche will use a Darracq racing car of great power, while Oldfield will handle the special machine with which he has covered a track mile in 56 2-5 seconds, and ten miles in 9:54 3-5.

In addition to the big match, there will be a special race between Ray Owen and his 10 horsepower Franklin, and Joseph Tracy, with a 10 horsepower Renault. The match will be at ten miles, starting from opposite sides of the track. Following is a list of the other events scheduled for the same day:

Event No. 1—Fifteen miles. For machines of any weight and any motive power. The Oldfield and La Roche machines barred. First prize, silver trophy, value \$100; second prize, silver trophy, value \$50.

Event No. 2—Ten miles. For machines of any motive power weighing under 1,800 pounds. First prize, silver trophy, value \$100; second prize, silver trophy, value \$50.

Event No. 3—Five miles. For machines of any motive power weighing under 1,200 pounds. First prize, silver trophy, value \$100; second prize, silver trophy, value \$50.

Event No. 4—One mile. Mile record trials. Open to all machines. Silver trophy for the fastest mile, and a medal in each class to the contestant who lowers the existing track record for the class to which his machine is eligible.



## DUE TO BAD GASOLENE

### All the Winton Troubles Were Attributable to That Cause, Says Shanks.

C. B. Shanks, of the Winton Motor Car Co., returned to New York on the Etruria last Saturday. He was besieged by reporters and finally decided to give out a statement concerning the cup race. His story is substantially as follows:

"Bad Russian gasoline, and not defective American machinery, was responsible for the poor showing made by the Americans in the Gordon Bennett race. The Americans, at least in so far as Alexander Winton and Percy Owen are concerned, were defeated, not because of mechanical imperfections in the construction of their cars. Nor were they lacking in skill as drivers. Neither had a single accident during the race due either to the machinery of their cars or their handling of them. A defective quality of gasoline was solely responsible for all the mishaps they encountered.

"Previous to my arrival the two racing cars had been taken over the highway near Timolin, and over a great portion of the race-course. They had behaved splendidly. The best grade of gasoline obtainable for these trials was 63 degrees (the worst that can be bought in the United States is 68 degrees). Yet, despite this, the cars had given a splendid account of themselves upon the Irish roads. Mr. Winton was not slow to discover the difficulty in the character of the gasoline, so the first day after my arrival at Timolin at his request I went to Dublin to find, if possible, a better grade of gasoline. After considerable research I located a quantity which registered 68 degrees, and had it shipped to headquarters. The results with this were more satisfactory. Both Messrs. Winton and Owen were not slow to appreciate the difference.

"Two days before the race we heard that the French and German contestants had brought with them supplies of gasoline of excellent quality, such as they had been accustomed to use in Continental races. We also learned that the English competitors had a special brand of petrol, so that it was evident to us, even before the race, that our competitors had been forewarned as to the character of gasoline to be obtained on the spot. That was a heavy handicap against us, and one destined to prove very costly.

"Next day a London automobilist visiting Camp Winton told us of a gasoline refined from Russian crude oil which would test at least to 72 degrees, and strongly advised us to get some of it. I found that a dealer in Newbridge, fourteen miles from Timolin, had a stock of this on hand. I drove over to Newbridge in one of our touring cars, and found the gasoline, of which I purchased a hundred gallons at 60 cents a gallon. I

tested it myself by a hydrometer and found it registered 72 degrees, so therefore felt very confident that this part of our trouble, at least, was over. I arranged for its transportation by horse and wagon to Timolin, where it arrived at 9:30 p. m. on the eve of the race. We filled the tanks of both cars and arranged to ship the balance to the two controls at Athy, where Harold B. Anderson, of the Winton party, and myself each took charge of a control, he on the eastern circuit and I on the western. It was our duty to supply the Winton cars as they arrived on the respective circuits with gasoline and lubricating oil.

"On the morning of the race the two Winton cars left Timolin at half past five o'clock, Mr. Winton in the eight cylinder and Mr. Owen in the four cylinder, bound for the starting point.

"I see there has been some question raised as to the order of starting, and wonder expressed that the lighter machine driven by Percy Owen was given precedence to Mr. Winton's bigger car. This is how it happened. Two days before the race there was a drawing for places by representatives of each country at the Shelbourne Hotel, Dublin. Mr. Winton was not present, and in his absence Mr. Clarence Gray Dinsmore, as delegate of the Automobile Club of America, drew places for the American team. He informed us the following morning at the weighing scales at Naas that Owen was to start first of the American team, Mooers second and Winton third. This meant that in the general plan of starting Owen had third place, Mooers seventh and Winton eleventh.

"By the time Mr. Winton was called to the tape he had already discovered that something had gone wrong with his machine, but what it was did not appear. He tested the ignition, but everything was all right in that quarter. A careful scrutiny of every part of the motor failed to disclose the slightest cause for the obstinacy. Feeling confident that it was not the gasoline, since we had already overcome that difficulty, as we supposed, the last place to look for the trouble was in the carburetter. But even here everything was in good condition. Then the inlet valve nipple through which the fluid passes from the supply tank to the carburetter was examined. By blowing through this we found it was stopped up. Here was the trouble. A wire probe forced the passage and dislodged a solid deposit of paraffine. The much vaunted Russian gasoline, which we had supposed would smooth all our difficulties, was, after all, the cause of our undoing. As the gasoline was forced by gravity from the supply tank to the carburetter the paraffine separated and collected in the inlet valve nipple. The feed to the carburetter was completely cut off as a consequence.

"All this probing around for the cause of the trouble meant nearly an hour's delay to Mr. Winton. At the time for his departure, 8:10 a. m., he was working with the can-

kerous motor, and seven minutes after the time he was supposed to leave he saw the last of the racers, Mr. Foxhall-Keene, an American driving a German car, disappear over the starting tape. Forty minutes later, or at ten minutes to 9 o'clock, when the trouble had been located and temporarily remedied and the carburetter reattached to the motor, Mr. Winton drove up to the starting point and was off.

"The statement so frequently made that the eight cylinder car could get on full speed almost from the jump was more than verified by the statements of eyewitnesses who marvelled at the way Winton disappeared when he got the word. Half round the first circuit, however, the same trouble developed and the motor evidenced the same obstinate tendencies as were experienced at the starting tape. The remedy must be effected as before, and the process consumed many minutes. Over and over again it was the same story. All day long until late in the afternoon, when the winners had passed the finishing wire and the race was declared over, the two Wintons battled with this heretofore unencountered paraffine evil. Let me say right here that this is a phase of automobilism which has never been encountered in this country with American gasoline. We never look for paraffine because we know it is not there, and we did not expect it as a source of possible difficulty in Ireland.

"Owen's experiences were the same as Winton's. Time and again they had to dismount from their cars, always to find the trouble in the pestiferous paraffine clogged nipple. For forty miles or more they would go sailing along splendidly at a winning gait, and then it was a case of drawing up on the roadside and going through the motions of dismantling once more. One of the most exciting incidents of the race from the grandstand point of view was when Owen arrived back at the grandstand a few hundred feet ahead of Jenatzy. Charley Graham, Owen's mechanic, who was looking back down the track, told Owen that Jenatzy was on his heels. Owen's car was just then going like a bird, and it looked like a race for blood; but just as he was passing the grandstand that everlasting paraffine began to clog up again, and there was nothing for it but to make the best possible stagger to get out of reach of the grandstand, seek the roadside and let Jenatzy pass.

"Late in the afternoon when the Winton cars had covered little more than two-thirds of the complete course of 370 miles, the order came to stop. The race was over and all contestants were instructed to leave the course. The machinery of both cars is as perfect to-day as when turned out of the factory. There was not the slightest trouble with overheating; the steering gears worked perfectly; axles and wheels stood the service splendidly, and even the tires were everything that could be hoped for. Nothing but sheer hard luck, the result of confoundingly poor gasoline, was our undoing. Still, we are not out of the game, by any means."

# SAN FRANCISCO TO NEW YORK.



'Frisco to New York—from the broad, smooth Pacific to the turbulent Atlantic—annihilating the three thousand miles of space that separate them—this has been the dream of fearless travellers for more than a century. Fifty years or more ago the white topped Conestoga wagons, drawn by patient, plodding beasts of burden, traversed the distance, their goal the famed Eldorado then just discovered on the Pacific slope. Nearly a score of years ago a bicyclist rode and walked the distance separating the two seas, the zeal of the explorer urging him on. Now comes the automobile, which throws down the gauntlet to the locomotive and says that where one has gone the other can follow, and this without specially prepared rails of steel to provide a smooth, hard highway.

Undeterred by the knowledge that a great part of the journey must be made over apologies for roads, and other hundreds of miles where no roads exist, the Packard Motor Car Co., Warren, Ohio, determined to set one of their cars the formidable task. Failures marked the path, and predictions were freely made that this would add one more to the number. The trackless sand of the American Desert, the frowning heights of precipitous mountains, with naught but trails leading over them, the mighty rivers to be crossed, the inaccessibility of the country in case of trouble—all these failed to shake the company's confidence in the ability of one of their cars to get through. It was felt that in these cars there are certain relations between power and weight, between simplicity and completeness, as well as certain virtues in suitable carburation and ignition systems, whose value for American travelling conditions is not yet fully recognized.

It was considered that a car which should cross the lofty Sierras without troubles from the grades, altitudes or other causes, and should descend into the desert and successfully plow through the wind-swept sand and sage plains of Nevada and Utah, would lead to many serious inquiries as to the construction which could endure such work, and that

continued travel week after week toward the Atlantic Ocean would finally open the eyes of those too much enraptured with high-speed cars and make them realize that there is something more in the art of building automobiles for all around usefulness and pleasure than a haphazard collection of mechanical features borrowed from here, there and everywhere, without much thought of what it means to subject a more or less complicated mechanism to rough usage and perhaps unskilled treatment.

The plan finally matured, and the first step in carrying it out was taken on Saturday, June 20, when the "Packard Overland Car," manned by E. T. Fetch, as operator, and M. C. Krarup, as observer, crossed from San Francisco to Oakland on the 5 p. m. ferry on that date.

The start was made from the garage of Harold Larzalere, the Packard company's agent for the Coast, at No. 1,814 Market street. The car was then driven to the celebrated Cliff House overlooking the Pacific Ocean (where photographs were taken, which, however, were accidentally destroyed afterward). At the Oakland ferry the cyclometer registered sixty-eight miles, this figure indicating the amount of road testing received by the new car after leaving the assembling rooms at the factory at Warren, Ohio.

During the first evening out of Oakland,

of the valve had been pulled down under the broken point. It looked like the hurried work of a vandal, as this part of the mechanism had been inspected only the day before the start. The bearing was cut a little for lack of oil, but worked itself into good order during the next day's drive, after the needle valve had been filed to its proper shape.

After ferrying across the strait between Porta Costa and Benicia at 9 a. m. travel was resumed toward Sacramento, the capital of California, which was reached after 8 o'clock in the evening, the cyclometer registering 215 miles, or 109 miles on that day. The car passed through Benicia, Cordelia, Suisun, Fairfield, Vacaville, where lunch was taken; Dixon, Davisville and Woodland, going in all forty-six miles out of the planned route, partly to avoid a district adjacent to the Sacramento River, where floods in the spring had destroyed the bridges, and partly to recover a satchel which was lost out of the car between Vacaville and Dixon.

While the crank bearing remained somewhat heated during most of this day, the loss of power was not sufficient to stall the car on the sandy hills or to interfere seriously with the speed on the open stretches of smooth roads. Many of the latter had been treated with crude oil some time ago and afforded pleasant travelling, but as a rule the roads were extremely dusty, even to such an extent as to make the front

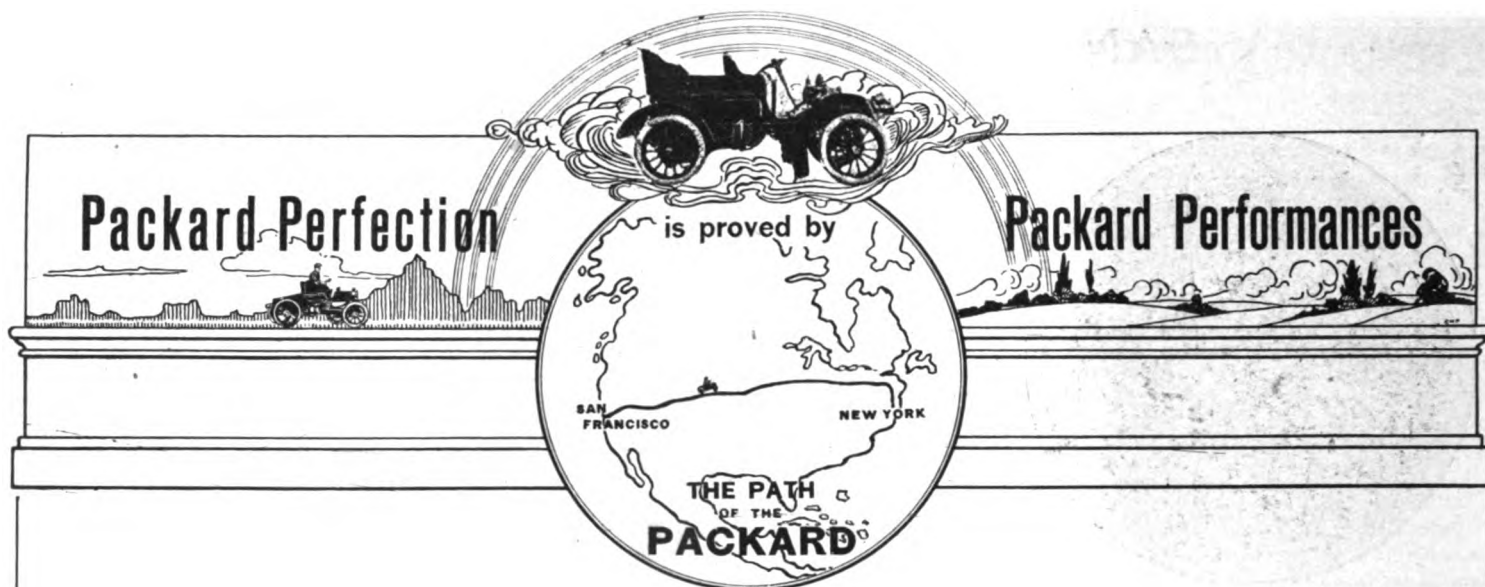


IN THE SIERRAS.

from about 6 o'clock until after 8 o'clock, the route to Porta Costa, in all thirty-eight miles, was covered without stop except for frightened horses, but it was noticed that the bearing between the crank and connection rod, in which there is a bronze bushing, was hotter than it should be. The cause was discovered the following morning at 6 o'clock. The coned point of the needle valve which regulates the flow of lubricant to the crank was found to have been nipped off with a blunt instrument, and the packing

wheels wobble in the tracks and totally obscure a rearward view from the car.

The copper boat which directs lubricating oil to the groove in the connection rod got loose at one end a few miles out of Fairfield, and was readjusted with copper wire, which operation required about fifteen minutes at the roadside. Apart from this no difficulties of any kind relating to the car were encountered, and the machine when entering Sacramento was in excellent condition to continue on the road.



*The man who made two blades of grass grow where but one grew before was, without doubt, a benefactor; but the man who makes ONE blade of grass grow where NONE grew before (i. e., the pioneer) would seem to be deserving of even greater credit.*



**O**UR achievements as motor car manufacturers entitle our conclusions to respect. The record of every prominent endurance contest or reliability run ever held in this country bears witness to the superb qualities of the Packard—the same qualities that have been so thoroughly demonstrated to Packard owners everywhere, that “Ask the man who owns one” has become familiar as a part of our regular advertising.

But even doing the same thing better than any one else fell short of our aims.

We wished to emphasize even more strongly the worth of the principles of Packard construction under all conditions, to prove their efficiency by subjecting them to the severest possible test—to have the Packard do what had before been attempted but not accomplished—to succeed where everyone else had failed.

## SAN FRANCISCO TO NEW YORK

became the magic cry.

And a long cry it is; just how long and how difficult of accomplishment is hard to convey. The story of the trip now appearing in THE MOTOR WORLD gives some idea, that is all.

What we hope is that the germ of the idea thus conveyed will lead to a more general appreciation of Packard worth; will open the eyes of the automobile-using public to the fact that here is a distinctively American machine, proven to be capable of performing the work for which it was designed—traveling over all kinds of American roads in all the wide changes of climatic conditions found on this broad continent and proving its range of power, flexibility and endurance by a performance embracing every variety of road travel.

We trust the story will prove both instructive and interesting.



**THE PACKARD MOTOR CAR COMPANY,**  
**WARREN, OHIO.**



## STUDEBAKER'S METHODS

### How the Metropolitan Branch of the Big Carriage Firm Handles Automobile.

In a modest corner of the salesroom of the big Studebaker establishment at Broadway and Forty-eighth street, New York, the automobile department is housed. A space probably 30x40 feet accounts for the whole, and in it are grouped four Studebaker electrics—one each of the runabout and stanhope type, each with and without top—a desk, several chairs, etc. The place breathes peace and quiet, and everything is clean as the wax which adorns the highly polished floor.

When a Motor World man sought the establishment a short time ago he found Manager Dumont at leisure, and ready to answer any and all questions that were propounded.

"How's business? Well, we have no cause whatever to complain," he said. "We have done well, remarkably well, considering that we entered the field only last fall. I feel sure that our people are entirely satisfied with the turnover here; and I know that if they were not on one would know it sooner than your humble servant.

"You know, I am an old bicycle man, having been brought up, as I may say, under Colonel Pope's management. From the A. B. C. store on Warren street I went with the International Motor Car Co., and while with them I learned a great deal about electric vehicles and the people who use them. Therefore I was right in line for such work as this, and I will say that I never saw a new vehicle take better or elicit more praise than these Studebakers. The Studebaker people know how to build horse drawn vehicles, having been at it long before either your or I were born, and that experience was not thrown away when they came to make automobiles. In the first place, the vehicle is the best that can be built; it is equipped with a motor—the Westinghouse—that is of equally high standard, while we supply such batteries as the Exide or Gould, and the whole is one that cannot be surpassed.

"Now, just take a look at this construction. You will see that the motor and batteries, as well as the body, are spring suspended. Did you ever stop to think what that means? Take the ordinary electric vehicle and run it at a good pace over Belgian blocks. You won't go far without slackening speed, for the vibration will be something that bids fair to wreck the vehicle. But do the same thing in this vehicle, and you will scarcely know you are not on asphalt.

"Again, take the matter of power and overload. If your radius is forty miles on one charge, it is wise to stop at thirty or even at twenty-five, if you don't want to overtax your vehicle. Or when you come to a stiff

hill be sure that you can surmount it without injury. I have taken people up Fort Lee hill without a falter, much to their surprise and that of others who thought I would fail. And when I got to the top I invited my passenger to put his hand on the motor and see that it was not hot. That frequently tells the tale. The motor's first protest will make itself known in that way.

"Where do most of our customers come from? Well, I should say from outsiders rather than from our carriage customers. The latter frequently drop in, of course, and remark that they know the Studebaker carriage so well they feel sure the Studebaker automobile must be nearly, if not quite, as good. But these are in a minority. Others probably know the reputation of Studebaker goods, and come partly on that account. But we get our fair share of the transient trade, too—the buyers who want automobiles and go around from place to



place examining, pricing and arranging for demonstrations.

"We have rather a peculiar custom about terms, too. It is an ironclad rule of the house that every automobile must be paid for before it is delivered. There is absolutely no deviation from this. A man may buy two or three carriages and have them charged to him in the usual way, but if he walks across the floor and invests in an automobile he must pass us his check for it before the transaction is closed.

"Doesn't the rule give us trouble? Never, except in the matter of explanation. I have never lost a sale on account of it. We go at the customer in a perfectly straightforward manner—tell him that the electric automobile is a delicate piece of machinery, requiring to be handled with judgment and care. A person may take one out and in five minutes damage it to the extent of hundreds of dollars. When we sell such a vehicle we assure ourselves absolutely that it is in perfect order when it leaves our place, and once in the buyer's hands he is responsible for its use. We don't have much trouble in satisfying them."

## A POLITICAL MACHINE

### Locomotive Loaded With a Governor, a Senator, a Mayor and a Plain Citizen.

Three politicians of some note, all of them accustomed to running the political machine, are shown in the accompanying illustration; yet they are well content to turn the running of this "machine," one of the Locomobile gasoline tonneaus, over to the non-politician of the party. All of the latter hail from the Nutmeg State. They are Governor Chamberlain of Connecticut, in the rear seat, with Dennis Mulvihill, the "Labor Mayor" of Bridgeport, on his right. Senator McNeill is in the front seat, with Archibald McNeill at the wheel. This well assorted group has been gathered together for a spin

in Mr. A. McNeill's car, and their implicit confidence in the skill and discretion of that gentleman is depicted in their faces.

### State got the Fees.

The Minneapolis, Minn., City Council is being blamed for the loss of the license fees extracted from local motorists. An ordinance had been introduced, but disagreements over it caused its failure. Had it been passed, the city would have received the fees; as it was, they went to the State under the new law, which recently went into effect. On the first registration day no less than 256 Minneapolis motorists registered.

### Only One Remedy.

Once a cylinder has worn out of round, and loss of compression ensues, it is useless to tinker with it. New piston rings will not help matters a particle. Indeed, they are more apt to make them worse, for the old ones have probably accommodated themselves in some degree to the oval cylinder, while the new ones, being true circles, will not fit at all.

## AUTOMOBILES IN MEXICO

**Only Good Roads Needed to Make Motoring Widespread—High Officials Interested.**

Mexico regards the automobile with marked favor, and motor vehicles are largely used for both pleasure and business. In the City of Mexico the demand is good for the best automobiles, and fine examples are to be seen there of some of the best known American products in this line, together with a number of European make.

The pioneer automobile house in the Mexican capital is the Mexican Electric Vehicle Co., and it is also the largest. While the company has a commanding lead in electric vehicles, it handles gasoline automobiles and holds the agency for some of the best makes of steam carriages. The garage is a large building at No. 12 Calle Primera de Humboldt. There is immense floor space, sufficient for the exhibition and storage of fully one hundred vehicles. The equipment is quite up to date, and it includes an electric charging plant, repair shop and every other convenience for motorists. The employees include a force of trained mechanics amply competent to deal with any trouble which may develop in a motor vehicle. The Mexican Electric Vehicle Co. was organized by American capitalists in 1900, Charles L. Seeger, who is president of the company, being the ruling spirit in the inception of the enterprise.

Another prominent establishment is that of Hilario Meenen, who laid the foundation of his present large trade in 1882, dealing in bicycles and sundries. He has added automobiles to his line of trade, and has successfully introduced the Locomobile, for which he is the local agent. Until March last he was located at No. 4 Avenida Juarez, but outgrew the premises occupied there. His present establishment at No. 1 on the same street is handsomely fitted up, well stocked and thoroughly equipped for the repair end of his business.

Both of the houses mentioned are popular with the people of the City of Mexico, and the two establishments are always open to visitors in the city, who are accorded a welcome and receive all such information as they may desire to obtain at such places.

The number of automobiles owned in the city is about 125, of which forty or fifty are of the electric type. On account of the poor condition of the roads the demand is principally for light vehicles of the runabout pattern, the Oldsmobile being one of the favorites. One of the results of the prevailing interest, however, is that the work of improving the roads is being pushed with increased vigor. It is because of poor roads that motoring as yet has not taken hold very much outside of the capital. Monterey has only four automobiles, and Guadalajara, with over 100,000 inhabitants, has but two.

As the sport was introduced only about three years ago this is, after all, not so bad a showing, especially when it is considered that a road journey of fifty miles in any part of Mexico, in any sort of vehicle, is a matter of trial and tribulation because of the bad going. That conditions will change is indicated in the fact that the Mexicans are anxious to have every road improved so that motor vehicles can be run safely over them all.

An automobile club has recently been formed in the City of Mexico for the purpose of promoting the sport and securing improvement of the roads. While this club will confine its labors and pleasures to the federal district, it is its purpose to promote good roads in all parts of the republic that are in communication with the city. Of the club President Diaz and the members of his cabinet are honorary directors, and Senor Jose Ives Limantour, minister of finance, is the honorary president. Senor Pablo Escandon is the active president of the club, Francisco Suinaga is vice-president, Javier Algara is treasurer, Charles S. Seeger secretary, and the other officers and directors are Fernando de Teresa, Ramon Corona, Jose de Jesus Pliego, C. Gordon Paterson and Rafael Bernal. There are fifty charter members in the club. The number of proprietary members has been limited to eighty. Minister Limantour has offered the club a splendid tract of land in Chapultepec Park. Upon this land the club contemplates the building of a chalet, and will make of it a place of reunion for the members and their families. It will be conducted practically as a country club.

The leading enthusiasts of automobilism in Mexico are the minister of finance, Senor Limantour; Pablo Escandon, W. A. De Gress, Charles S. Seeger, Garcia Zuazua, Javier Algara, Dr. R. Jofre, J. Thayer, W. C. Orr, Leo Frisbie, J. F. Mohler, C. Alvarez Rul, Rafael Bernal and C. Gordon Paterson. Those who brought the idea from Paris were George Braniff and Manuel Buch, and he who was first to be attracted by it after its introduction was Julio Limantour, brother of the minister of finance.

### To Apply to All Vehicles.

Those Sandusky horsemen who suggested that it would be a good idea to tax autos are now sorry that they spoke. At the last meeting of the Council an ordinance to license automobiles was passed. At that time there was considerable difficulty in coming to an agreement as to the license fee to be charged. It was finally placed at \$1.50 per annum.

Now, the report is that this ordinance is to be repealed, and in its place there will be substituted a general vehicle tax, which will include everything. This is being done in several of the larger cities of the State, and is a good means of raising revenue. The exact character of the tax has not been decided upon, but it is intended that automobiles, express and draymen, hucksters and vehicles in general will be included.

## MALAGA'S FAIR FIELD

**Ancient Spanish City Holds Opportunity for American Automobiles—A Beginning.**

According to Consul D. R. Birch, of Malaga, who writes from that place under date of June 10, there is a good field there for American automobiles.

"Within the last few months an interest in automobiles of American make has been manifested in Malaga. This is due in part to the recent importation of a French machine of the racing type, which is the only automobile now in Malaga," he says.

"A few days ago one of the most influential men in this city requested me to procure for him price lists and catalogues of American automobiles, and to-day another of Malaga's representative men informed me that he had just placed an order with a Detroit firm for the purchase of a machine propelled by gasoline, and that several of his friends are awaiting the advent of the first American machine to compare it with European designs. This seems to be an excellent opportunity for American manufacturers who desire to establish a market here, as the marked advantage in prices in favor of the American machines seems to be understood in Malaga. The roads about this city offer facilities for trips to nearby villages, and the outlook is that within a short time many machines will be in use here.

"If American manufacturers will send their catalogues or other reading matter to this consulate I shall take pleasure in handing them to parties interested and in placing them in the reading room of the principal club of Malaga.

"Promptness of delivery is an essential point that should not be overlooked by American manufacturers sending machines to Spain. The French makers have an immense advantage in this respect.

"I am informed that nowhere in Spain—certainly not in this section—is there an American automobile firm represented by an agency."

### A Leisurely Tour.

Mr. and Mrs. William Huston, of Columbus, Ohio, are making a thorough test of the automobile as a pleasure vehicle. They left home several weeks ago for an extended trip Eastward, and are proceeding in a very leisurely manner. Thus far they have got as far as the vicinity of the national capital. A week was devoted to resting at Carlisle, Pa. A visit was paid to the Gettysburg battlefield, and during last week they visited the Shenandoah Valley, passing one day at the famous Luray Caves.

In addition to its other disadvantages, an overheated engine consumes nearly double the ordinary quantity of gasoline.



## PUZZLED THE DRIVER

**Was Used to Horses and Could not Locate Automobile's Simple Trouble.**

"Just as business houses have to contend with stupid drivers who are always having trouble with their horses, so, when the motor vehicle comes into general use for commercial purposes there will be the unthinking or unknowing chauffeur whose vehicle is always going wrong," remarked a man in the trade to a Motor World representative.

"An incident of the sort came to my notice not long ago," he went on. "I was out on a country road, some fifteen miles or so from New York, when I met a motor delivery wagon in trouble. It was stopped by the roadside, and the driver was plainly at his wit's end. He was the picture of despair. If he hadn't been too old I really think he would have relieved himself by a good cry. He was wandering aimlessly about, peering at various parts of the mechanism in a way that showed how completely discouraged he was.

"Drawing up to the side of the road, I got out and went over to him. A few well put questions brought out his story. He had been handling the car for about ten days, in which time he had encountered some trouble, but not a great deal. He was formerly a horse wagon driver, and when his firm put in this motor vehicle he had been selected to run it. To fit him for the task, he had been sent to the factory of the concern making the vehicle, to learn the principles of automobile construction. While there he had acquired a smattering of knowledge, but, of course, no real insight. The people at the factory did not seem to think this necessary, he said, and he had not pressed the point.

"In the present case he was a marvellously puzzled man. He could not, for the life of him, tell what the trouble was. I nosed around, asked a few questions, and then formed my opinion. I hinted as much, but was promptly shown to be in error. If the driver could not locate the trouble—and he frankly admitted as much—he at least knew what it was not. It wasn't sooty spark plugs, nor defective mixture, nor poor gasoline, nor anything else that I could name. He had tried all that. Well, what was it, then? As to that he could not say, but he knew that it was something entirely out of the ordinary.

"It was really something very simple. My line of questions brought out the information that the vehicle ran all right down hill, and even for awhile on the level. But as soon as an upgrade or a prolonged level was encountered the engine would slow, and then stop altogether. The cause was with the gasoline supply. Instead of employing a gravity feed, the gasoline was pumped into the carburetter, and at first I suspected that something was wrong with the pump. But a closer examination revealed the fact that it was working all right. Then, for certain symptoms seemed to point to the gasoline

feed, I discovered that the supply of gasoline going to the carburetter was not regular. Some impurity in the gasoline had partly choked the valve, and it was only in going down hill, when gravity circulation gave the pump help, that the flow of the fluid was sufficiently strong to nullify this obstruction. Hence, down hill the engine worked fairly well, but when it struck a level or hill the valve closed and the engine stopped.

"There was a much astonished man when I explained all this and removed the obstruction. The engine was started up, and ran without a skip. 'I'll remember that little trick,' called the grateful driver, as he resumed his journey. But will he?"

## WOMEN AT THE WHEEL

**The Number of Chauffeuses in Brooklyn Made the Visiting Tradesman Stare.**

"There are more women automobile drivers in Brooklyn, I think, than in any other place," remarked a tradesman who had been in the City of Churches for the first time. "They drive like experts, too, handling their cars in the most approved style and seeming to be devoid of fear.

"When I went over to Brooklyn the sight of the first woman driver interested but did not surprise me. She was in an electric run-



ITALY'S KING GOES AUTOMOBILING.

### Police Woke up.

An ordinance regulating the speed of automobiles was passed in La Crosse, Wis., last December, but the police of that city have just become aware of the fact. Consequently no attempt has been made to enforce it, but hereafter motorists exceeding the speed limit will be arrested. Except on certain streets, where the speed is limited to six miles, automobiles are allowed to run at the rate of fifteen miles. Each vehicle must carry a suitable gong to be rung continuously while approaching and crossing intersecting streets; and a lighted lantern or headlight must be carried between sunset and sunrise.

### Pittsburg's Auto Population.

Between 650 and 750 is the estimated number of automobiles owned in Pittsburg, according to A. L. Banker, the well known dealer of that city. Of these 150 have been purchased this spring and summer.

about, and threaded her way in and out among the traffic in dashing style. She was alone. About half an hour later I saw a second woman driving, also alone, and in an electric. I began to wonder if that was the custom in Brooklyn. The third car had two occupants, both women. A fourth car was a gasolener, and this time there was a man and a woman in it, and the latter was driving! I began to think that the Brooklyn females were a race of Amazons.

"Since then I have learned that the majority of drivers in Brooklyn are men, just as they are everywhere else. But, all the same, I contend that there are more chauffeuses in that city than in any other I ever visited."

### Auto for Pastoral Calls.

The value of the automobile for everyday use has received clerical recognition in Michigan, where the Rev. E. J. Blekkink, pastor of the Second Reformed Church, in Kalamazoo, has purchased one to use in making his pastoral calls. Mr. Blekkink is given the distinction of being the first clergyman in Michigan to own a motor propelled vehicle.

### The Love of Speed.

There are in the minds of most human beings three great incentives to energy. There is the desire of wealth, the desire of power and the desire of love, and every action can be traced to one or other of these mainsprings, says the Car.

Nowadays some people talk of another desire, the love of speed, as a new and modern-born ambition. But is not this instinct, which is almost universal, in reality very old?

Are not speed competitions on foot or horseracing as old as the world itself? The very toddling child hates being passed by another infant. The cabman, the bus driver like also to keep in front, and even the man in the street, that sometimes imaginary but always present individual, does not like being passed.

Why was the horse originally trained for the service of mankind? If the pulling of weights at a slow speed had been the only consideration the bullock would have served equally well.

And the higher the civilization of a nation the greater the desire for speed. The workman in the streets boasts about the train or trolley service of his town, not on the ground that it is more convenient, but because it is faster than some rival city possesses. The fastest Atlantic liners are the best filled with passengers though they may be less comfortable than the slower boats.

Motor cars, therefore, are the outcome of a perfectly natural desire to move faster on the road, and the instinct of speed is not a modern development or new desire, as some writers seem to think, but one of the strongest inherited instincts in the human race. The man slow of foot, or the man who rode the slow horse in the primeval history of mankind, was caught and killed. Nowadays the slow nations are dying out, and men die not singly, but in thousands—crushed by competition.

Did any one ever yet habitually go by a slower train because it was slower?

The feeling of the twentieth century is, "Let us get our work done well—done to-day—done quickly." This use of roads for speeds higher than the horse can achieve is only the modern echo of the Roman age of good roads and fast chariots. The swift galley of those days pleased its owner, and the fast prancing pair of steeds delighted the young Roman, but neither of them pleased their owner more than the workman priding himself on his bicycle. To him bicycling is a vast improvement over walking. A motor car delights the quondam bicyclist, and in the higher degree this man is also enthused.

The strenuous man, whatever his calling in life, is always saying: "Let me get on!" This feeling expresses the maybe unconscious effort of all of us to annihilate time and space. We cannot Marconi with our bodies; we must therefore be content to use a motor car. The mysteries of thought transference have not yet been revealed, so the telegraph, the telephone must serve.

If communication with the planets were possible the etheric-telepathic office would be crowded with would-be senders of messages, for there is no victory the human race more earnestly strives for than the conquering of time and space. The battle against delay is ever being waged, and costs more victims than the campaigns of rifle and sword.

There are then, again, the three great original and innate desires, and the love of speed is really not a fourth desire, but a part of the love of power—power over time and space—an influence in politics, economics and human life generally, hardly less potent than any one of them.

There are some men who love the rowel of the spur in their backs. There are those who detest it. There are others who need it not and do the work of the world, for in the human race there are many strenuous men always combating delay, divinely possessed by the consuming, dominating, driving desire of action, of getting to the front. The nation possessing such citizens will conquer the world.

### Deposits and Guarantees.

The question of paying deposits when giving orders for automobiles is one that requires serious consideration from intending purchasers. Of course, when a firm is expected to make a car it is only right that it should have some guarantee that delivery will be accepted and the remainder of the purchase money forthcoming; but, on the other hand, the customer needs protection as well. Hence he would do well to withhold deposits unless substantial security is given. In many cases old and established reputations are probably sufficient, but there is a general feeling growing up that the guarantee of deposits is necessary in all business transactions.

### No Longer Exclusive.

Exclusiveness will no longer rule in the Detroit Automobile Club. The old officers have resigned in a body, and a meeting to reorganize the club is to be held this week. It is proposed to enlist the support of all motorists, instead of, as in the past, restrict the membership to a select few. The resigning officers were as follows: Truman Newberry, president; D. M. Ferry, jr., treasurer; W. H. Burtenshaw, secretary.

### Addresses are Necessary.

Chauffeurs applying to the Automobile License Bureau of the Secretary of State's office at Albany, N. Y., should be particular in sending their address with their applications. Twenty or more licenses are held there at the present time, owing to the neglect of this necessary proceeding. This may explain to some persons the non-receipt of the licenses for which they may be looking with impatience.

The strength of an automobile is its weak part.

### His Friend Goggles.

My friend Goggles invited me to take a voyage in his gas car. Goggles is good on description, and he told me all about automobile construction and gas engines. He is also much of a humorist, and as I am a tyro in the horseless art I was made a butt for his witticisms.

"We will get into the chassis and shassay all over town," he said. We did, and the time we made it can't be beat. The old mule, Goggles calls it a mule, 'cause it's stubborn, had no use for its feet, or wheels. I have a fancy these were dropped off somewhere in the middle distance.

"This is no idle pipe," said Goggles, at the same time pointing with his index finger to a cordlike copper tube. Something happened and we got out. "It's the inlet valve," said Goggles. I didn't know these gas cars were vocalists, but Goggles's Blue Assassin would send Jean and Edouard hunting the happy ground.

When Goggles referred to the bonnet I thought he had in mind a bunch of petticoats across the avenue. Later I found it took three yards of Russia iron, slashed up the sides with hemstitching, to make an automobile bonnet. They call these cars horseless vehicles, but Goggles's car has a sparking plug for all that.

I would think some of these motor car owners would be run in for conducting a gambling hell. The chauffeur runs a wheel. He's a good confidence man, because he is a strong steerer. Goggles, who knows much about gas engines and women, says it is great fun to go sparking in an automobile.

"Do you like chain drive or shaft drive best?" asked Goggles of me. I told him if it was all the same to him we'd take Riverside Drive. We hadn't gone far when something happened. "We slit a pinion," said Goggles. I thought he meant something to eat. "I'd rather have a piece of the second joint," I said. Goggles was mad.

One of the low forehead gentry didn't like the color of Goggles's car, and, to tell the truth, I wasn't struck with the color scheme myself. A man with a chicken's curiosity to cross the road was, though. The car struck him about five hundred feet from Grant's tomb. He lay in the hospital a week, thinking of cooling streams. He got so far in advance of the rest of the world that he was beside still waters while we were only in green pastures.

A piece further up the road Goggles showed me the intricate working of the engine. "This is the radiator," he said. The janitor mustn't have been working that day, for not a bit of heat was coming up. "And this," he continued, "is the hot air chamber." Honest, it wasn't a bit like my law office. The engine wasn't acting good that day, Goggles said, and I noticed that it was cranky. These engines, I might say, from my limited experience, are a bit eccentric.

This trip of mine differs materially from other trips I have been told of in that we got home without resort to a public carriage. For the life of me, I can't tell what kind of a car Goggles owns. It isn't an electric one, because Goggles hasn't good enough credit to get one charged. Goggles, who looks over my shoulder as I write, says it is a hot air mechanism. I don't know whether he means me or the milk churn up in front. Goggles has asked me to go riding with him again. He says it is necessary to have a tank aboard. I don't like his tone of voice.

**Kansas City Club's Annual.**

At the annual meeting of the Automobile Club of Kansas City, Mo., held on the first inst., the following named officers were elected for the ensuing year: President, William Huttib, Jr.; first vice-president, Harry Loose; second vice-president, Dr. G. L. Henderson; treasurer, Henry C. Merrill; secretary, Myron C. Albertson; captain, Roy Sanborn; lieutenant, A. C. Griffith; directors, J. N. Penrod, E. P. Moriarty, C. F. Lovejoy, H. T. Blakeley, T. W. Day and Louis Curtiss. Previous to the election the club, by a rising vote, extended its thanks to Louis Curtiss, the retiring president.

The club appointed a committee consisting of H. C. Merrill and E. P. Moriarty to arrange for the entertainment at an early date of the Interstate Association, which is made up of clubs in St. Joseph, Atchison, Topeka, Leavenworth and other nearby towns. The programme is expected to include several hill-climbing contests, speed tests and a run through the boulevards.

**Six Miles for Steubenville.**

Six miles an hour is the limit for automobiles in Steubenville, Ohio, and the motorists of that city are up in arms against an ordinance which would enable a fat policeman to overtake them on foot if he should imagine that they were over-speeding. The automobile contingent in the city do not object to a regulation of speed, but they would like to be permitted to run their

cars just a little faster than a sprightly man can walk. Steubenville has other restrictions. Automobiles are not permitted in the cemetery, the most beautiful ride in that locality, which appears to be an unnecessary prohibition, as, under the speed regulation, they could not race even with a hearse.

**Justice is Blind.**

A French automobilist had rather a hard time of it the other day. First, his car was stolen and the thief, while running through the country with it inflicted considerable damage before he was arrested, which latter happened at Saint-Mand. In a day or two the owner received letters from the Mayor of Saint-Mand explaining that the machine was in pound there and had been attached in various indemnities by several victims. The owner thereupon wired the Mayor that these accidents occurred through no fault of his, whereupon he received the following telegram: "Your name is on the machine, and justice must follow its course."

**Progressive Bar Harbor.**

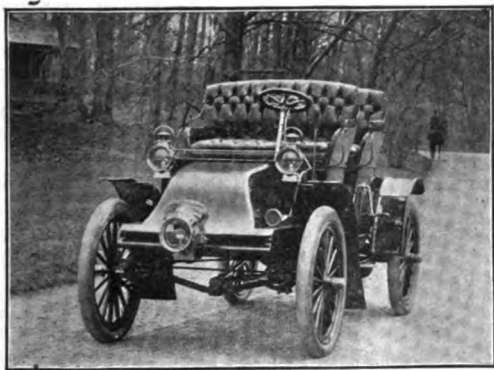
The threat made some time ago to close to automobile traffic a number of important roads in and near Bar Harbor, Me., was carried into effect last week by a vote of the town. This is considered a serious matter by summer residents, as it restricts the use of machines to the side streets of the village, and the thoroughfares included in the prohibition embrace the main roads leading into the surrounding country.

**Form the Granite State Club.**

The Granite State Automobile Club of Manchester is the name of the organization of automobilists just established in New Hampshire's progressive manufacturing city. The organization was effected June 29 at a meeting attended by a number of prominent men, among whom were H. E. Loveren, Ed Langley, Arthur Dumas, A. F. Wheat, W. J. Hoyt, T. J. Labrecque, James L. Johnston, Fred Fisher, George C. Campbell, Shirley B. Dodge, Charles M. Floyd, C. C. Clifford, A. L. Clough, Peter Harris and C. E. Green, all of whom are members. The officers chosen are: President, Walter M. Parker; secretary and treasurer, Albert L. Clough; directors, Harry E. Loveren, Fred Fisher, Charles E. Green, A. E. Dumas and Colonel W. J. Hoyt. A club meet and parade meet will probably be arranged for an early date. A club headquarters, where visitors from other clubs may be entertained, is also favored by some of the members.

**Wants Damage for Injured Car.**

Charles E. Bartley, of Chicago, has asked that city to pay him \$100 for damage done to his automobile through a defect in Forty-first street. In a letter to City Attorney Smulski, transmitted to the City Council, Bartley asserts that he was running slowly and while his companions were joking about the mud one of the wheels dropped into a hole, the jar causing breakage and twisting which entailed repairs amounting to upward of \$500. Bartley threatens to sue if the city does not settle.



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## The Week's Patents.

732,372. Generator for Igniters. Leon J. Le Pontois, New York, N. Y., assignor, by mesne assignments, to the Auto-Igniter Co., New York, N. Y., a corporation of New Jersey. Filed August 8, 1902. Serial No. 118,916. (No model.)

Claim.—1. In a generator for producing pulsating currents, the combination with a magnet having one leg provided with two pole projections, of a coil surrounding one of said pole projections, and a movable mass of low magnetic reluctance adjacent to the poles of the magnet and adapted to close the path of magnetic flux through said pole projections, and provided with a section of high magnetic reluctance adapted to divert the flux from one of said projections to the other, thus varying the flow of flux through the coil and generating a current in said coil.

732,510. Vehicle Frame and Driving Axle

732,536. Chain Boot for Automobiles. Carl G. Fisher, Indianapolis, Ind. Filed February 20, 1903. Serial No. 144,315. (No model.)

Claim.—1. The combination with an automobile provided with a suitable power transmitting means, a gear case surrounding the axle of the vehicle, a brake band connected with the body of the vehicle and surrounding the driving shaft, and a cross bar intermediate said gear case, of a boot made of flexible material with the sides adapted to be folded up over said power transmitting mechanism, and means on the boot for securing the same to said gear case, brake band and cross bar for holding the boot in place.

732,553. Motor Vehicle. Charles A. Hider, Baldwin, Ind. Filed April 23, 1903. Serial No. 153,893. (No model.)

Claim.—1. In a motor vehicle a driving gear consisting of a transverse counter shaft; a pair of sprocket wheels fixed on the said shaft; a friction wheel adjustably mounted on the shaft; means for transmitting power to the friction wheel; a pair of sprocket wheels fixed on the carrying axles by a knuckle joint connection as described, and a pair of sprocket chains operatively connecting the sprocket wheels on the counter shaft with the sprocket wheels on the axles.

732,710. Motor Road Vehicle. Henri Cauzard, Troyes, France. Filed March 31, 1900. Serial No. 10,956. (No model.)

Claim.—The combination with a road vehicle, of a large funnel shaped air collector arranged in front thereof, and pipes leading therefrom rearwardly and at opposite sides of the body of the vehicle and exteriorly thereof, the rear ends of the pipes terminating at the rear of the vehicle body, the said pipes being provided with exit orifices along the sides of the vehicle whereby to adapt the same to discharge air collected by the collector in a direction away from the vehicle body, and a pipe into which the pipes conduct air and having upturned end portions provided with discharge openings.

732,789. Air Brake for Vehicles. Joseph S. Smart, Wait, Mich., assignor of one-half to James Perkins, Wait, Mich. Filed March 14, 1903. Serial No. 147,822. (No model.)

Claim.—In an air brake for vehicles, an air chamber, an air pump disposed within and opening into said air chamber, a pump rod, a foot lever having a treadle at its upper end connected at its lower end with said pump rod, and a spring normally forcing said pump rod in an outward direction.

732,834. Gearing. Wilbur O. Dayton and Lawrence E. Brennan, Chicago, Ill., assignors to Bode Automobile Company, Chicago, Ill., a corporation of Illinois. Filed

June 18, 1902. Serial No. 112,250. (No model.)

Claim.—In a friction gear, the combination with a face wheel, or a wheel having its bearing periphery composed of revoluble sections contacting with the face wheel and having their axes in the plane of the wheel upon which they are mounted.

732,842. Secondary Battery. William Gardiner, Chicago, Ill., assignor to Northwestern Storage Battery Company, a corporation of Illinois. Filed January 23, 1902. Serial No. 90,940. (No model.)

Claim.—In a device of the kind described, an outer tray or receptacle forming one of the electrodes and comprising a relatively shallow metallic pan or box, a conductor permanently secured thereto, a cover adapted to be permanently secured thereon and to hermetically seal said tray, and an inner shallow tray having a perforated bottom and inclosed within and insulated from the outer and containing the other electrode, and a conductor extending therefrom through the outer tray and insulated therefrom.

732,843. Method of Preparing Electrolytes. William Gardiner, Chicago, Ill., assignor to Northwestern Storage Battery Company, a corporation of Illinois. Filed January 23, 1902. Serial No. 90,941. (No specimens.)

Claim.—The method of accumulating an excess deposit of a metal, upon an electrode by repeatedly charging a cell containing in solution an oxid of the metal and a caustic alkali and replenishing the oxid in the solution between successive charges, then when sufficient of the metal has been deposited replenishing the cell with a solution of the pure caustic alkaline solution.

732,846. Brake for Auto Cars. Alexander Govan, Glasgow, Scotland. Filed December 9, 1902. Serial No. 134,491. (No model.)

Claim.—In brakes for auto cars and like vehicles the combination with the brake wheels and brake bands of stationary brackets each securing one end of each brake band, arms attached to the other ends of the brake bands, bell cranks, links jointed at one end to the arms and at the other end connected to the outer arms of the bell cranks, a rod connecting the inner arms of the bell cranks, rock shaft, brake lever handles secured to said shaft and brackets secured to said handles and supporting the bell cranks as described.

732,870. Self-Propelled Vehicle. Hermann Lemp, Lynn, Mass., assignor to Elihu Thomson, Swampscott, Mass. Filed March 27, 1900. Serial No. 10,385. (No model.)

Claim.—1. In a vehicle, the combination of a spring-supported frame, an engine and its driving-shaft, supports to hold the engine and shaft in proper alignment with the frame, a boiler which is separate from the engine, means independent of the engine for securing the boiler to the frame, a driving and a driven axle, a device for maintaining a fixed distance between the engine-shaft and the driving-axle, and a pivotal connection which is included in said device.

732,872. Support for Motive Power Agencies. Hermann Lemp, Lynn, Mass., assignor to Elihu Thomson, Swampscott, Mass. Filed August 9, 1901. Serial No. 71,519. (No model.)

Claim.—In an automobile the combination of a frame, a motive device, a main shaft, a two-part intermediate shaft, bearings secured to the side tubes of the frame for supporting the outer ends of the intermediate shaft, differential gearing between the inner ends of the intermediate shaft, gearing be-

tween the main and intermediate shaft, a gear casing for inclosing the gears, and bearings carried by the engine for supporting the intermediate shaft at the point of division.

732,908. Driving Mechanism for Automobiles. Elihu Thomson, Swampscott, Mass. Filed November 27, 1900. Serial No. 37,800. (No model.)

Claim.—The combination of a constantly driven pump, a hydraulic motor controlled thereby, a valve for varying the admission of fluid to the pump, and a body of porous material through which air passes for automatically reducing the vacuum created in the pump as the admission of fluid thereto is decreased.

732,943. Clutch Mechanism. Camille Jenatzy, Fils, Brussels, Belgium. Filed December 16, 1902. Serial No. 135,391. (No model.)

Claim.—In a magnetic clutch, the combination of an armature, a clutch adapted to be engaged and released, a plate carried by said clutch and adapted to be attracted to said armature, means to operate said clutch, and means connected to said clutch operating means for energizing the armature.

732,944. Transmission Device for Motor Vehicles. Camille Jenatzy, Fils, Brussels, Belgium. Filed March 17, 1903. Serial No. 148,151. (No model.)

Claim.—In combination with the running gear, a dynamo, a motor operating same, a field magnet crown operated by said motor, a driving shaft, an armature carried by the driving shaft, and rheostatic means between said dynamo and field whereby to gradually increase and decrease the speed of the armature.

732,975. Tachometer. Curtis H. Veeder, Hartford, Conn. Filed May 6, 1902. Serial No. 106,130. (No model.)

Claim.—A speed indicator comprising a liquid pump, an indicator tube connected to one side of said pump, a reservoir connected to the other side of said pump, and an adjusting valve interposed in the connection between said pump and said tube to interpose resistance between the pump and the tube and check vibration of the liquid in the tube, substantially as described.

732,993. Speed Changing Device for Motor Cars. Adolf Angst, Schaffhausen, Switzerland. Filed August 20, 1902. Serial No. 120,358. (No model.)

Claim.—In a speed changing mechanism, a driving shaft, a friction wheel thereon, a stepped friction cone and means to move the cone into and out of engagement with the wheel, substantially as described.

733,093. Means for Regulating the Power of Automobiles. Elihu Thomson, Swampscott, Mass. Filed July 21, 1900. Serial No. 24,383. (No model.)

Claim.—In an automobile, the combination of a motor, a boiler, a means governed by the changes in profile of the path travelled over, for varying the amount of water supplied to the boiler and a manually actuated device for modifying the action of said means.

733,178. Dry Battery. Eugene M. Fishell and Marcus H. Moffett, Cleveland, Ohio, assignors to National Carbon Company, Cleveland, Ohio, a corporation of New Jersey. Filed April 14, 1902. Serial No. 102,707. (No model.)

Claim.—In a dry battery, in combination, a metallic case, a plurality of electrically connected cells carried therein, packing surrounding said cells, a metallic cover sealed to



said case and having two holes through it, wooden members secured to said metallic cover on the inner side thereof covering said holes, a sealing material in the space between the cover and cells, and binding posts serving as terminals for said cells secured to said wooden members and passing through the holes in the cover.

733,193. Variable Speed and Reversing Mechanism. Ralph B. Hain, Los Angeles, Cal., assignor to Auto Vehicle Company, Los Angeles, Cal., a corporation of California. Filed February 4, 1903. Serial No. 141,816. (No model.)

Claim.—The combination, with a driven shaft and a master gear and sprocket wheels loose on said shaft, of a clutch member which is splined with the driven shaft and adapted to engage either sprocket wheel, a driving shaft, clutches mounted thereon and pinions rigidly connected with the respective clutches and engaging the master gear, pivoted levers suitably connected with each other and with the respective clutches on the driving shaft, a hand lever pivoted and adapted for shifting backward or forward and laterally, and a lever connecting it with the clutch member of the aforesaid sprocket wheels, substantially as shown and described.

733,198. Pneumatic Tire. Robert A. Harris, Tucson, Ariz. Filed December 17, 1902. Serial No. 135,560. (No model.)

Claim.—A pneumatic tire comprising an outer case, and a series of independent inflatable sections arranged therein, each of said sections being of bellows form providing for expansion lengthwise of the tire.

733,220. Valve Gear for Explosive Engines. Arthur Krebs, Paris, France, assignor to Ste. Ame des Anciens Etablissements Panhard et Levassor, Paris, France. Filed December 11, 1902. Serial No. 134,876. (No model.)

Claim.—The combination of a valve, a rotating cam having a movable part pivoted thereto adapted to operate said valve, and capable of being projected outward from the body of the cam to varying extents, a longitudinally sliding rod having an inclined surface adapted to engage said movable part to vary its degree of projection in accordance with the movements of the rod, whereby said valve is given varying movements.

733,265. Rotary Engine. Alfred I. Osterlander, New York, N. Y. Filed November 28, 1902. Serial No. 133,001. (No model.)

Claim.—A rotary engine, comprising a fixed casing, a cylinder mounted to rotate in the

casing, a cylindrical abutment arranged eccentrically in the cylinder, a piston plate connected to the cylinder and movable into and out of an opening in the cylindrical abutment, and a controlling valve carried by said piston plate, substantially as specified.

733,354. Draft Device for Automobile Furnaces. Fred C. Cheesewright, Denver, Colo. Filed December 31, 1902. Serial No. 137,229. (No model.)

Claim.—An automobile boiler provided with a movable induction device located below the burner and arranged to be automatically regulated by the wind whereby its mouth is kept pointed toward the wind regardless of the direction of the vehicle's travel.

733,358. Tachometer. Curtis H. Veeder, Hartford, Conn. Filed February 18, 1903. Serial No. 143,935. (No model.)

Claim.—A speed indicator comprising a liquid reservoir, an indicator tube concentrically disposed with respect to said reservoir, and a pump interposed between the reservoir and the indicator tube, substantially as described.

### Elyria Celebrates the Fourth.

Thirty-five automobiles from Cleveland aided in making sport for the holiday crowd at Elyria, Ohio, on Independence Day. They joined the Elyria Club in the parade and participated in the races at the fair grounds. A ten-mile race, open to all, was the first contest and was won by Derango of Cleveland (Peerless) in 18:58½; Ed Parsch of Cleveland (Peerless) was second; H. E. Tomey (Winton) and Leon Milonski (Winton), both of Cleveland, were third and fourth. Three Oldsmobiles contested the second event, which was won by Andy Auble of Akron, with Doc Springston of Cleveland second and Otto Owen of Cleveland third.



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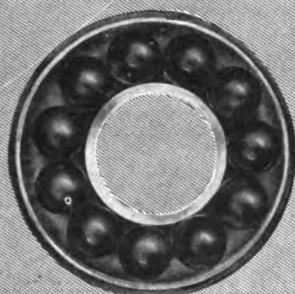
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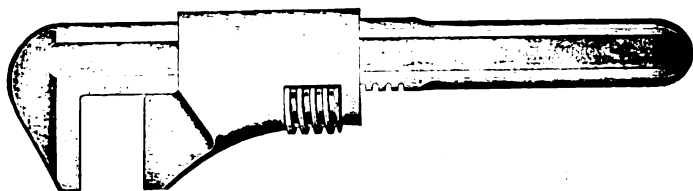
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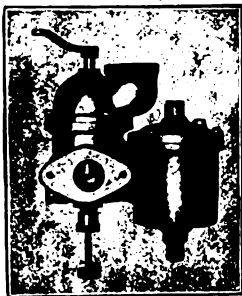
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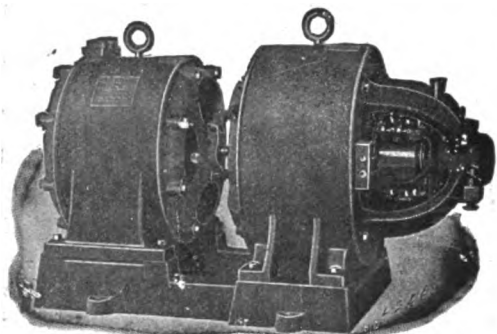


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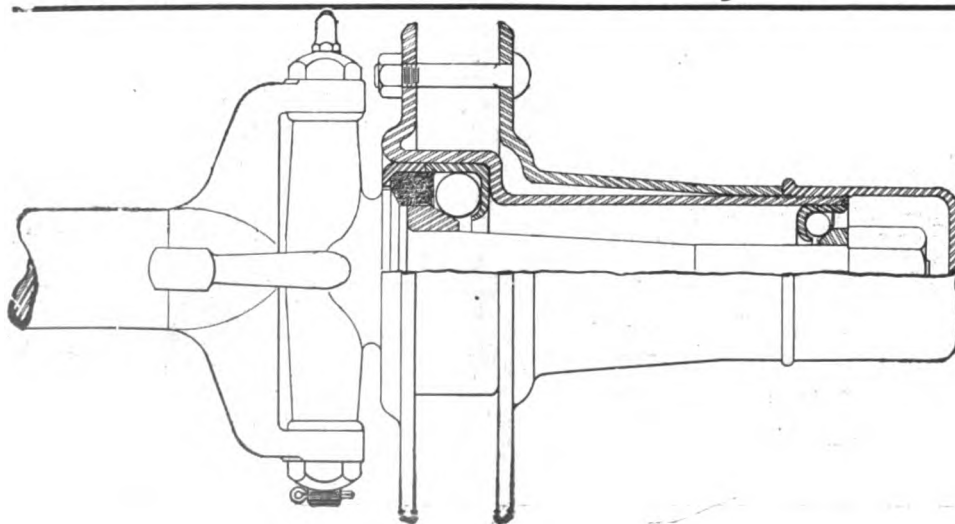
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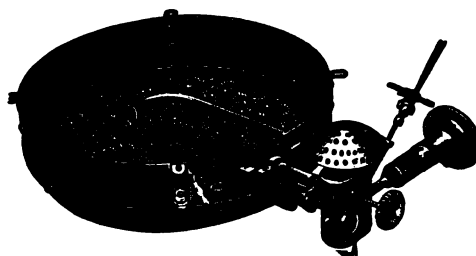


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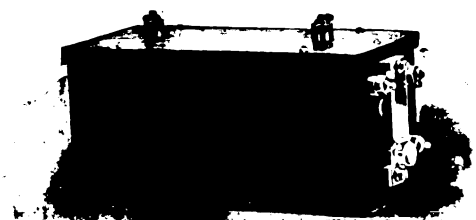


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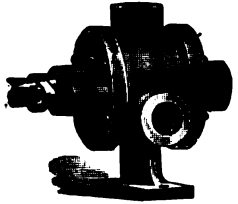


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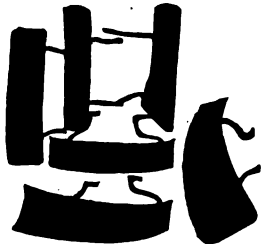
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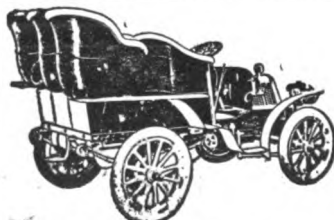
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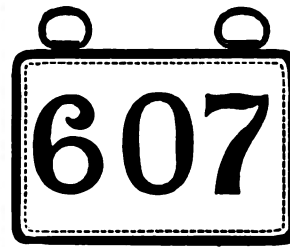
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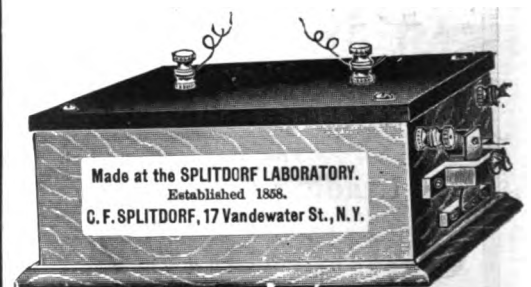
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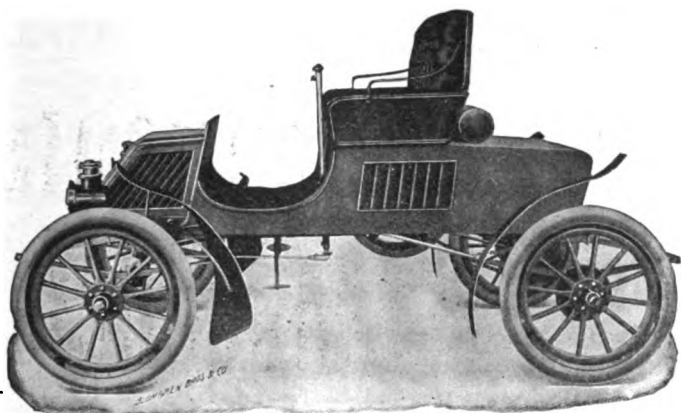
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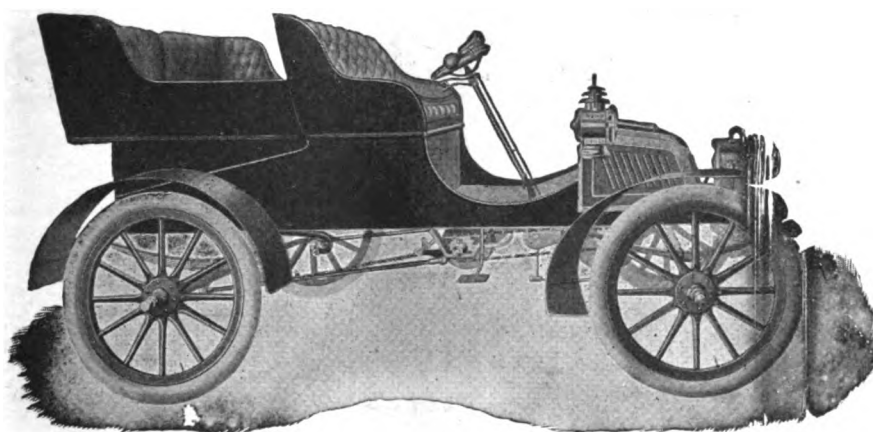


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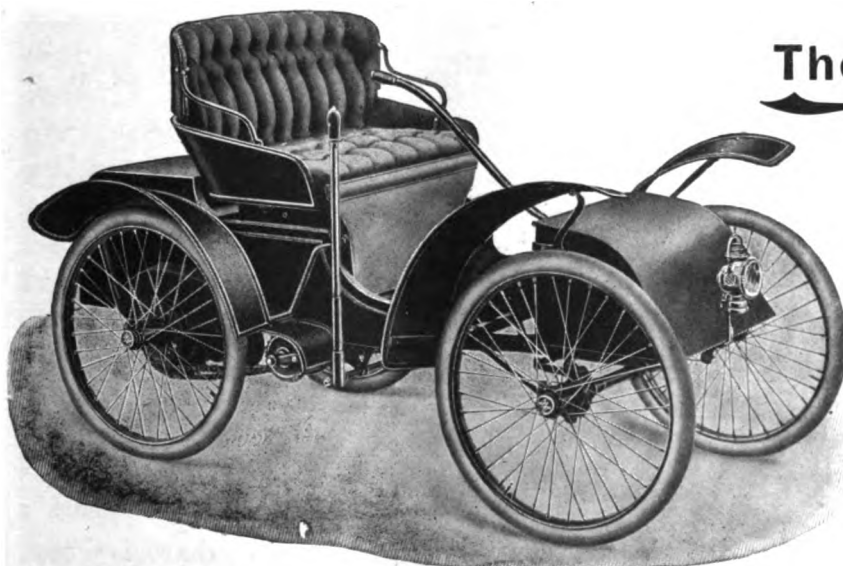
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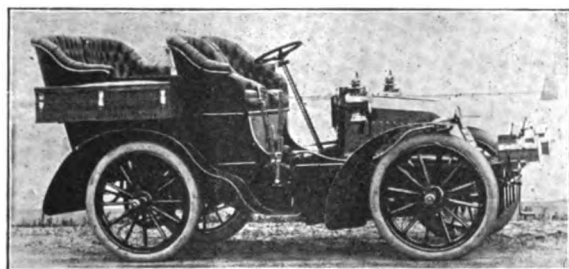
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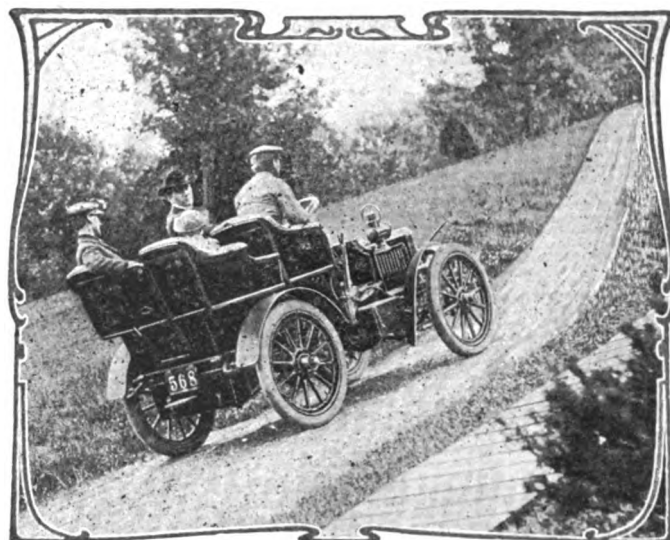
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2nd "	.	59	Two miles,	.	1.55 2-5
3rd "	.	59 3-5	Three "	.	2.55
4th "	.	1:00	Four "	.	3 55
5th "	.	59 3-5	Five "	.	4.54 3-5
6th "	.	59 3-5	Six "	.	5.54 1-5
7th "	.	1:01	Seven "	.	6.55 1-5
8th "	.	1:00	Eight "	.	7.55 1-5
9th "	.	59 3-5	Nine "	.	8.54 4-5
10th "	.	1:00	Ten "	.	9.54 4-5
TOTAL, . 9.54 4-5			Mile Average, 59 4-5		

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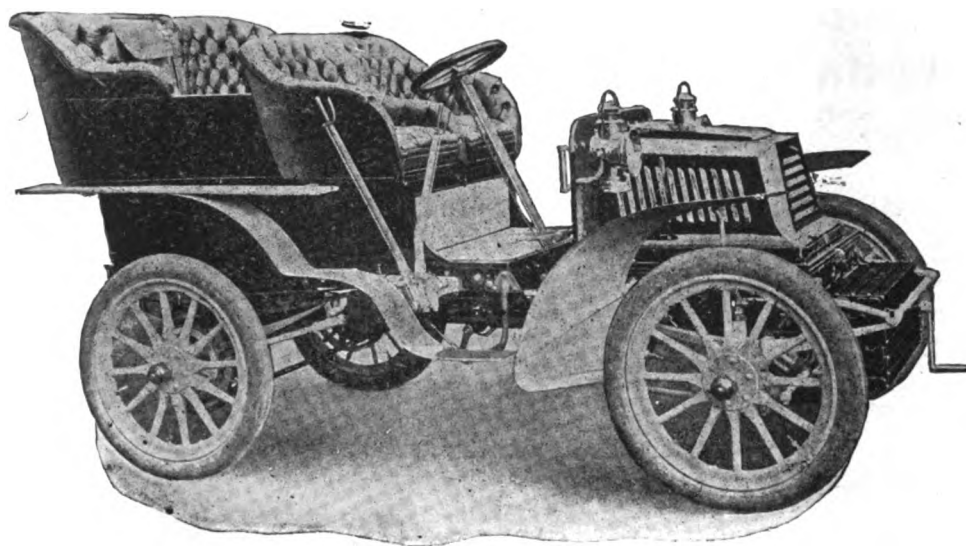
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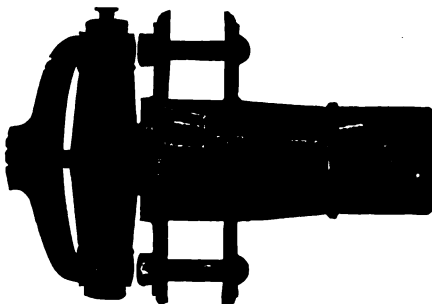
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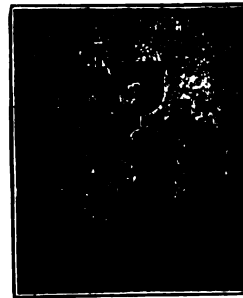


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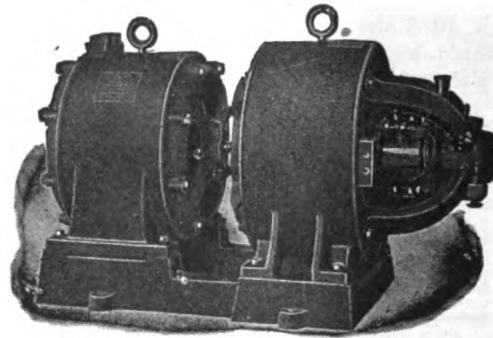


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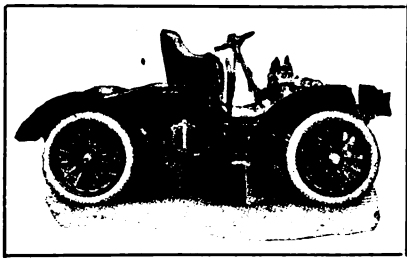
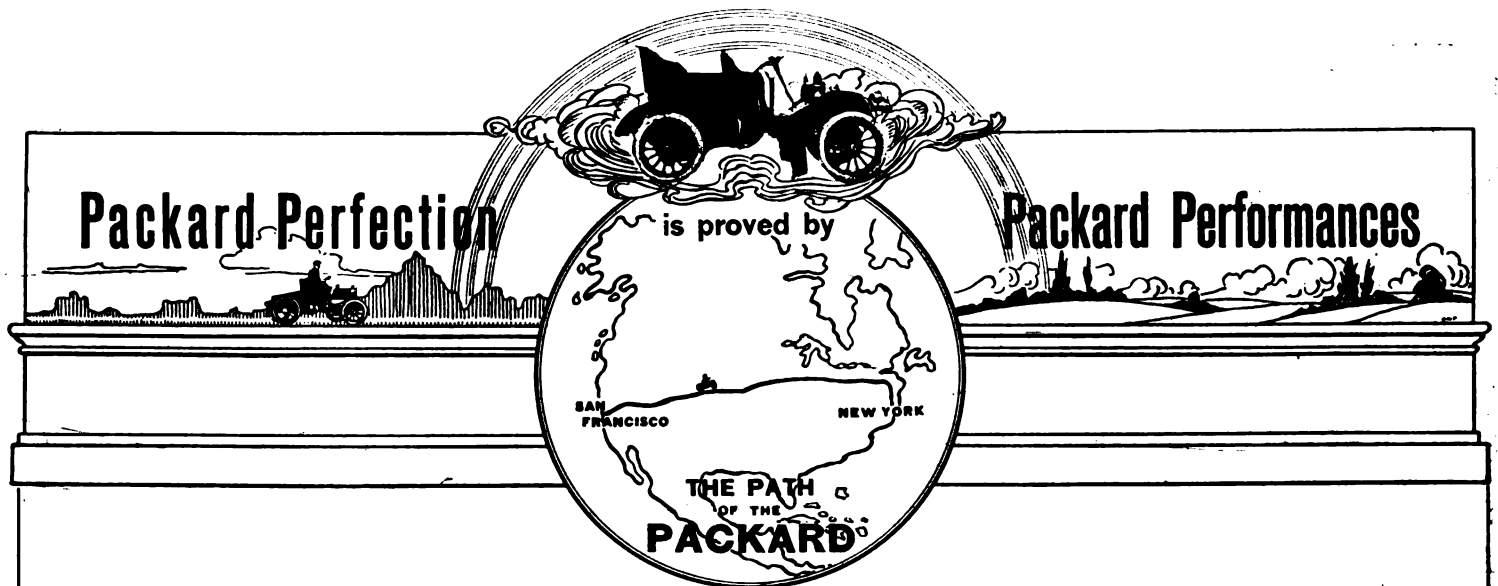
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We also make Disc Radiators and we aim to make them the best on the market.

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When any description has passed the point where the mind can grasp it, it is necessary to resort to some simple comparison in order to put such a value upon it as will place it in proper relation to things easily understood.

So it is with this Packard Overland Journey. People who have never been west of the Rockies and people whose knowledge of that country has been gained from the windows of our modern railway palaces, are alike unable

to compass the fact and ask: "How much IS that?"

Our country has rightly been named one of magnificent distances. To the man in New York, Chicago is away out west and yet he can reach it by train in twenty hours. The man in Denver is twenty-five hours from Chicago or forty-five from New York and yet the most powerful mountain-climbing locomotives and finest railway equipment in the world cannot take him from Denver to San Francisco in less than seventy hours.

There were no half measures used when Colorado was made. Utah, Nevada and California are almost entirely of volcanic origin. The quartette present engineering difficulties unequalled anywhere in the world and before which the pioneers in railroad construction stood appalled. There are alkali deserts, treacherous quicksands, salt marshes and bottomless sloughs. There are great distances to be travelled without water and many mountain ranges to be crossed, some of the summits reaching an elevation of over two miles.

And so in railroad travel it has come to be considered that two-thirds of the continent lies west of Denver and in automobiling, that the motor car which could live through the journey from San Francisco to Denver, could live through anything that anyone, anywhere, might ever ask of it.

Many have tried to make this trip. The Packard only has succeeded. It has remained for our single cylinder motor with its few parts to look after, to lead the way through every difficulty, to surmount every obstacle and by virtue of its absolute reliability, its reserve power, its simple and flexible construction, to withstand the fearful and racking strains of this awful test—to succeed where all others have failed.

"Old Pacific" was scheduled to reach Denver July 20th, just thirty days from the time it left San Francisco. With a punctuality that will go down into history, with its magnificent daily average of over seventy-five miles it arrived there on the day appointed.

It will continue eastward through Omaha, Chicago, Cleveland, Buffalo and Albany to New York.

And this car is no different from any other Packard car. It is designed according to what our experience has taught us a touring car should be and it is built the best we know how. With the same care and attention it will give you better satisfaction than any other motor car made.

It can carry "A message to Garcia."

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Members Association Licensed Automobile Manufacturers.





FROM  
**SAN FRANCISCO**  
 IN A  
**WINTON**

**T**HE recent triumph of our standard, regular model 20-horse power Touring Car is without parallel in American automobile history. When Dr. H. Nelson Jackson, of Vermont, who was spending the season in California, decided to attempt the transcontinental trip, he consulted neither manufacturer or sales agent, but purchased a second-hand Winton Touring Car at a premium price, and after three days preparation bid farewell to friends in San Francisco and started upon the long ride toward New York City.

At the time of starting the main route over the Sierras which follows the line of the Southern Pacific Railway was congested with snow and closed to all traffic. It was necessary, therefore, to make a long detour north into Oregon to find a passable trail across the high ranges. The route necessitated crossing the Great Desert where the disheartening difficulties of sand, alkali and sage brush wastes were battled with and mastered. This route led far away from railroads and possible bases of supply, but the plucky tourists plunged into the open country and "took chances." The thrilling experiences in that remote and desolate country, as recited by Dr. Jackson and Mr. Croker, his traveling companion, contribute a most interesting chapter to the world's history of automobile touring.



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# TO NEW YORK CITY IN A WINTON



**I**T was not a specially constructed car with attachments designed for special service in the mountains and upon the deserts. The men who occupied the seats were not selected factory mechanics who had spent weeks and months in preparation. There was no elaborate system of relays for duplicate parts, new tires and general supplies. Dr. Jackson started out with one extra tire, four extra spark plugs, a shovel, an axe, a block and tackle, a cooking and camp outfit and a bulldog. When he came "out of the west" he narrated the interesting facts of his remarkable journey—he told his own story in a modest way, there having been no paid advertising agent in the party whose duty it was to disseminate fiction.

Dr. Jackson kept a detailed and accurate record of this, the first successful ocean to ocean automobile journey. It is interesting to read. He has kindly consented to its publication, and those who care to have it may obtain a copy of this illustrated record by addressing the Winton Motor Carriage Co. Ask for "The Transcontinental Automobile Record." (It will be published in the forthcoming number of the Auto Era.)

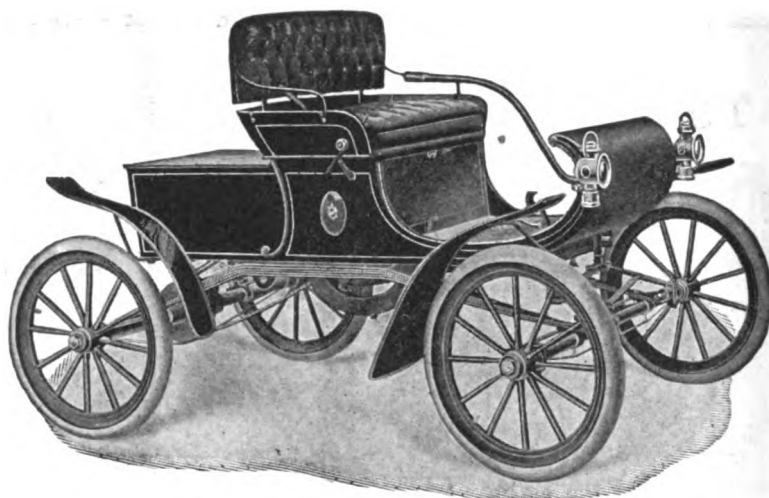
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SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.  
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TUCSON, ARIZ.—F. Ronstadt.  
WASHINGTON, D. C.—National Capital Automobile Co.  
HAWAIIAN ISLANDS.—R. N. Halstead, Honolulu.  
GREAT BRITAIN AND IRELAND—Locomotive Co. of Great Britain, Ltd., London, Eng.

GERMANY—All Germany except Cologne)—Earnest Weingaertner, Berlin; Cologne, L. Welter & Co.  
FRANCE—Eugene Merville, Paris.  
SWITZERLAND—Automobile Fabrik Orion AG., Zurich.  
ITALY—Victor Croizat, Turin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingle & Co., Johannesburg and New York.  
NEW SOUTH WALES—Knowles Auto. & Power Co., Sydney.  
VICTORIA—Hall & Warden, Melbourne.  
QUEENSLAND—James & Sons, Brisbane.  
SO. AUSTRALIA—Duncan & Fraser, Adelaide.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
JAPAN—Brühl Bros., Yokohama and New York.  
ASIA—MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, July 30, 1903.

No. 18

## CONRAD COLLAPSES

**Inability to Meet Payroll Precipitates the Crash  
—Liabilities are Heavy.**

The Conrad Motor Carriage Co., Buffalo, N. Y., was forced to the wall on Monday last. The failure was not unexpected. Inability to meet its matured notes was a symptom that made plain that the crash could not be long averted. The climax was reached on Saturday, when money was not forthcoming to meet the weekly payroll.

Accordingly on Monday a majority of the directors confessed insolvency and applied to the Superior Court for an order of dissolution. The court appointed George W. Atterbury receiver of the concern, and fixed his bond at \$40,000, and issued an order directing the creditors to show cause on August 30 why the application should not be granted.

Mr. Atterbury will carry on the business of the company, attempting to realize as much as he can on its assets. He was its treasurer and a director. He also is a large creditor.

In the petition for dissolution it is stated the capital stock of the Conrad Motor Carriage Co. is \$100,000, divided into 1,000 shares of a par value of \$100 each, and of the stock \$87,500 has been issued. The directors who make the petition for dissolution are Marcus M. Drake, William E. Peugeot and George W. Atterbury, three of five. They state in affidavits the liabilities of the company amount to about \$100,000, and the assets nominally are worth about \$90,000, but actually are worth only \$40,000. The company was incorporated in 1900.

The principal creditor, from the schedule attached to the application, appears to be Mr. Drake, who holds the company's secured note for \$10,000, an unsecured note for \$5,627, and who also has loaned the company \$18,282. Mr. Atterbury also is a large creditor, having advanced to the company between \$7,000 and \$10,000. The majority of the other creditors are persons and companies from whom the motor company bought material. The assets consist for the most part of the plant and automobile parts.

## Sackett on Searchmont Staff.

L. J. Sackett, for many years with the Waltham Mfg. Co., and latterly with the Locomobile Co., has been added to the travelling staff of the Searchmont Automobile Co. He is preparing for an extended trip that will extend to the Pacific Coast. If not the first, Sackett was certainly one of the first gasoline vehicle salesmen in this country, his experience dating from the manufacture of the Orient quads and tricycles by the Waltham Mfg. Co., which concern he also served as superintendent of its testing department. General Manager Gash of the Searchmont company was at the time also identified with the Waltham company as business manager.

## Evidence of Chillicothe Expansion.

The directors of the Motor Storage & Mfg. Co., Chillicothe, Ohio, have voted to increase the capital stock of the company, and have authorized the purchase of additional machinery for the factory. The demand for the Chillicothe car, according to a local source, is "so great that they cannot be turned out fast enough, three having been sold during the past week, and two others would have been taken had they been in stock."

## Odd Fire in Olds Factory.

A fire of peculiar origin attacked the Lansing plant of the Olds Motor Works last week, but was subdued before damage ensued. A shed in which a quantity of lime was stored caught fire in a peculiar manner and was destroyed. The lime became wet and slaked, causing so much heat that the building was set on fire. Workmen on an adjoining building lost their tools, and the lime and shed were a total loss.

## Peterson Takes a Partner.

What was K. Franklin Peterson is now Peterson & Draper, Jesse Draper having been admitted to partnership. The firm will remain at the former Peterson address in Chicago, and will continue as jobbers and manufacturers' agents. Draper was previously connected with the Federal Mfg. Co., which means that he is thoroughly familiar with the what's what and who's who of the trade.

## SELDENITES TO MEET

**Dates Set for the Niagara Falls Session—Nature of Meeting Altered.**

The projected meeting of the Association of Licensed Automobile Manufacturers at Niagara Falls has been definitely arranged and will occur on August 14 and 15 next.

The nature of the meeting, however, has been somewhat altered. Instead of being purely a conference of superintendents and factory experts, it will be a general meeting of the members of the association, to which the factory heads will be invited.

The idea of bringing the various 1904 models of the machines to Niagara Falls has been abandoned. It will be a meeting for discussion and interchange of opinion, not for comparison of cars.

## To Build Cars in Herkimer.

The James A. Clarke Co., Herkimer, N. Y., are about to engage in the manufacture of automobiles. An experimental car has been completed and is now running on the streets of Herkimer. It is driven by an 18 horsepower gasoline motor, has a tonneau body, and on its trial trip performed very satisfactorily.

## Gets Oldsmobile British Agency.

Charles Jarrott & Letts, Ltd., is the style of the London concern which has taken over the Oldsmobile agency for the United Kingdom. Jarrott is the same who represented England in the Bennett Cup race, and Letts was formerly in charge of the Locomobile interests in Great Britain.

## Miller Opens Uptown Branch.

"Automobile Row" is to have an addition of a somewhat unusual kind. On August 1 Charles E. Miller, the well known Reade street jobber, will open a branch store at 127 West Thirty-eighth street, right in the heart of the retail and garage district. Here he will carry a full line of automobile supplies.

## New One in Louisville.

The Kentucky Automobile Co. is the style of a new concern which has established itself at Nos. 414 and 416 West Main street, Louisville. Hubert Levy is the head of it.

## CO-OPERATIVE GARAGES

### How a Quintette of Wealthy New Yorkers Seek to Avoid Exorbitant Charges.

Certain members of the Automobile Club of America have for some time been discussing the feasibility of establishing in New York City a co-operative garage, or a system of garages which would make automobile owners independent of the trade places. As an outcome of this a circular was issued last Saturday inviting co-operation. The plan proposed is an organization of owners of automobiles "for the purpose of cutting down the exorbitant charges now made for repairs, supplies and storage."

The method proposed is, to quote further from the circular, "to form an association or club which will establish three garages, one located on the West Side, one on the East Side, and one in Harlem, as centrally located as may be. At least one of the garages is to be perfectly equipped with the best modern devices for making any kind of a repair that may be needed, with a competent and full force of expert mechanics. It is designed, also, to have at each place competent chauffeurs, so that machines may be safely delivered or called for at any place the owners may desire."

Strict business principles are suggested as the basis of the organization, and fair charges are to be made for all service rendered, these charges to be reduced from time to time as the profits of the association may warrant. In order to carry out the plan it is deemed necessary that not less than fifty subscriptions at \$1,000 each be obtained for the establishment of each garage. The matter is in the hands of a committee which has consented to act temporarily for the purpose of obtaining subscriptions and perfecting the organization. Its members are Jefferson Seligman, treasurer of the Automobile Club of America, and Frederic B. Cochran, Henry S. Thompson, Benjamin B. Tilt and S. W. Henck, all members of the same club.

This proposition has naturally caused much comment in the trade, and while some of the representative men are inclined to pooh-pooh it, there are others who declare that if it is carried out it means war between the trade and the clubmen. In the opinion of Samuel A. Miles, manager of the National Association of Automobile Manufacturers, the matter is not worth discussing.

"The scheme can never be put through in the world," Mr. Miles remarked. "It will soon die of itself without any action by the dealers."

A bit of importance is conceded to it by E. B. Gallaher, chairman of the technical committee of the American Automobile Association, who holds that the clubmen have no call to enter into the trade sphere of the automobile interest.

"In building up automobiling in this country," said Mr. Gallaher, "the makers and dealers have stood the brunt of the expense.

Now that the time has come when they may look for some profit, they should not be robbed of it. For years, while the industry was in its infancy, the dealers were forced to devote most of their profits to making good defective parts. Now that the cars are being made fairly perfect, the dealers should be given a chance to get back some of the money they spent in making good defective parts. This they had to do promptly at their own expense or lose trade, as customers would not wait to have parts replaced from the factories. This was necessary in a new industry. Now the clubmen seek to butt into trade and injure those who depend upon it for their livelihood.

"You can rest assured, though, that if forced to the wall the makers and dealers will retaliate. This they can easily do by raising the price of supplies furnished these club garages and refusing to supply their stockholders with missing parts. The makers will back the dealers up and compel the amateur tradesmen to go to them for what they need.

"The dealers' association will take this matter up, and if it needs help from the N. A. A. M. it will without doubt get it. I don't believe, though, that the clubmen or other gentlemen who own automobiles will consent to be dragged into trade. Competition is growing, and this competition will adjust perforce all questions of high prices and overcharging."

### The Week's Incorporations.

Detroit, Mich.—The Huber Automobile Co., under Michigan laws, with \$100,000 capital.

Irvington, N. Y.—Mobile Storage and Repair Co., under New York laws, with \$5,000 capital. Incorporators—John and James R. Walker.

Covington, N. Y.—The Mobile Storage and Repair Company, under New York laws, with \$100,000 capital. Directors—John Walker, sr., J. R. Walker and J. C. Walker, all of Covington, N. Y.

New York, N. Y.—The De Witt-Allen Auto Co., under New York laws, with \$5,000 capital. Incorporators—Henry S. Allen, Thomas A. De Witt and William A. De Witt, all of New York, N. Y.

Buffalo, N. Y.—Rapid Transit Automobile Company, of Buffalo, under New York laws, with \$10,000 capital. Directors—Charles W. Roe and John M. Campbell, of Buffalo, N. Y., and Arthur S. Hartsell, of New York City.

Reading, Pa.—Acme Motor Car Co., under Pennsylvania laws, with \$200,000 capital. Directors—James C. Reber, George D. Horst, Jacob Bolde and John D. Horst, all of Reading, Pa.; treasurer, James C. Reber, of Reading, Pa.

Jamestown, N. Y.—Gurney Ball Bearing Co., under New York laws, with \$100,000 capital. Incorporators—John M. Brooks, Charles M. Nichols and Charles M. Waite. Directors—E. C. Hall, W. F. Falconer and Benjamin Nichols, all of Jamestown, N. Y.

## PLOTTING THE ROUTE

### N. A. A. M. Pathfinders Outline First Four Days of Next Reliability Run.

Harry Unwin, secretary of the National Association of Automobile Manufacturers, who is laying out the route for the endurance run to be held under the auspices of the association in October, has laid out, tentatively, the following for the first four days of the run, which will cover the distance from New York to Buffalo:

First Day—Leave New York and go up the east side of the Hudson on the old Post Road to Rhinebeck, cross the ferry to Rondout and then climb the hill to Kingston. Distance, 100½ miles.

Second Day—Kingston to Briceville, through Shokan, Bench Ford, Phoenicia, Pine Hill, Fleischmann's, Arkville and Margaretville to Andes, there to climb the steep Palmer's hill, thence to Delhi and through Franklin, East Sidney and Unadilla. Distance, 102 miles.

Third Day—Through Bainbridge, Afton, Ninevah, Harpersville, Belden, Port Crane, Binghamton, Union, Campville, Owego, Waverly, Elmira and Gibson to Corning. Distance, 125 miles.

Fourth Day—Across the Chemung River through Savona, Bath, Avoca, Cohocton, Dansville, Mount Morris, Geneseo, Avon and Corfu to Buffalo. Distance, 145 miles.

This covers the 472 miles between New York and Buffalo; the fifth day will be between Buffalo and Erie, and the sixth between Erie and Cleveland.

### White to Move Uptown.

On or about August 1 the automobile department of the White Sewing Machine Co.'s New York branch will be domiciled in a building of its own. The premises at 215 and 217 West Forty-eighth street have been leased for a term of years, and are being made ready for occupancy. The building is a two-story and basement one, and will be used as a salesroom and garage. The increasing business of the branch has made a step of this kind necessary. The present garage in East Nineteenth street will be discontinued.

### Opens Branch in New York.

A New York branch has been established at No. 113 West Thirty-seventh street by the Cleveland Automobile Supply Co., with Leon Rubay as manager. The company will sell the specialties of G. Lacoste & Co., of Paris, and do a general supply business.

### Fire Destroys Garage.

The shop and garage of Clifford Bonneville, near New Rochelle, N. Y., was totally destroyed by fire on Tuesday night. The cars of several wealthy patrons were consumed.

## DR. JACKSON ARRIVES

### First Automobilist to Cross Continent Completes Trip in 63 Days—His Interesting Story.

Known to only a few persons, Dr. H. Nelson Jackson, of Burlington, Vt., rolled into New York on Saturday night a proud and happy man. He had accomplished what every one he had talked with told him was impossible; and he had been the pioneer, had written his name on the roster of fame as the first man to span the 3,000 miles of space that separates the Pacific and the Atlantic. Other aspirants for the honor were in pursuit; but, starting first, he easily maintained his lead and carried off the prize. Leaving San Francisco on May 23, he had been on the road sixty-three days, forty-four of which were consumed in the running time.

"It may sound almost incredible, for the



Stuck in a "Buffalo Wallow"—Dr. Jackson Looking on.

railroad distance is only 3,000 miles, but when I reach my home at Burlington, Vt., I shall have covered 6,000 miles on my trans-continental trip." So declared Dr. Jackson to a representative of the Motor World at the Holland House on Tuesday. "This distance has been measured by cyclometers, and is, I am convinced, accurate. Early in the trip I found that we were covering from one-fourth to one-third more than the railroad mileage, so often were we compelled to leave the adjacent roads; and to avoid the Nevada deserts we went nearly 1,200 miles out of our way, striking to the north into Oregon."

Dr. Jackson is bronzed and vigorous, full of energy and vitality and full of enthusiasm over his long and arduous trip. Big and of stocky build, decided in his actions, he is just the man to undertake and carry through a pioneer journey of this kind. His chauffeur, Crocker, is smaller and slighter, but is also "nervy" and alert. As Dr. Jackson told

the story of the trip to the Motor World man Crocker would occasionally interject a word or sentence, pithy and timely.

"It was a terribly wearing trip, and one that at times seemed to come to an impasse. But we pulled through, and I want to say right here that there never was a time when I wished I hadn't started, and I am sorry that it is over.

"Why did I undertake the trip? Well, partly for pleasure and partly to have the honor of first accomplishing this seemingly impossible journey. It started in a discussion at the club in San Francisco—you have



Literally a Rocky Road.

doubtless heard the familiar story—when everybody pooh-poohed the idea of even attempting such a journey. I had been staying in California for some time, combining business with pleasure, doing a little automobiling in the mean time. After leaving the club I went home and mentioned the matter of crossing the continent in an automobile—not intimating then that I thought of driving the vehicle myself.

"Why not go north into Oregon instead of straight across?" my wife suggested. 'You remember what a fine country it was when we passed through on the train.'

"That set me to thinking, and I had a talk with a friend of mine, a postoffice inspector, who was familiar with all that section of the country. He shared the common belief as to the impossibility of crossing Nevada, but thought that by diverging to Oregon the trip could be made. Then I began to really think seriously of the matter, and had a talk with Crocker, my chauffeur.

"You can do it if you get a Winton car," he declared. "That has plenty of power and is staunch and reliable, and it will carry you through if anything will."

"After looking over a Winton car I came to the conclusion that Crocker was right. But how in the deuce was I to get a Winton! It was not as easy as it was to decide on one. It was then the latter part of May, and people who had ordered Wintons long

before were still waiting for them. So there seemed small prospect of my stepping in and securing one at the last minute. Fortunately I had a friend who had received his Winton a week or two before. I went to him, and managed to persuade him to sell it to me for a bonus. Then I went to the local agent and arranged with him to send me parts along the route in case I needed them.

"I was now ready to start, and on May 23 I got away from San Francisco. It was my desire to avoid all newspaper publicity, and not even the makers of the Winton knew about my attempt. If I got through there would be glory enough; while if failure fell to my lot the less notoriety there was the better it would be in every way. So Crocker and myself started off with a good supply of the things that we considered would be necessary during the trip, including a block and tackle; and I render only due justice to the latter when I say that without it we never would have got through.

"Looking back at the trip now, it is odd to



Fording a Stream in Wyoming.

reflect that the dreaded parts of the journey across the Sierra Nevada Mountains really proved easy, while through Wyoming the going was much worse; and as for Nebraska, that was where we nearly failed to get through. But it was the weather that proved our greatest enemy. It had rained for two weeks before we got to Wyoming, and every day coming through there we got a little more of the clouds' seemingly inexhaustible supply of moisture. Through Nebraska, and, indeed, all the way to the Hudson River, it rained every day and all day. The last day of our journey was the only one that the downpour ceased. Consequently we had flooded roads—where there were roads at all—nearly all the way.

"We passed through or touched eleven States on our journey to this city, viz., California, Oregon, Idaho, Wyoming, Nebraska, Iowa, Illinois, Indiana, Ohio, Pennsylvania and New York. Our mileage now is a little

(Continued on page 663.)

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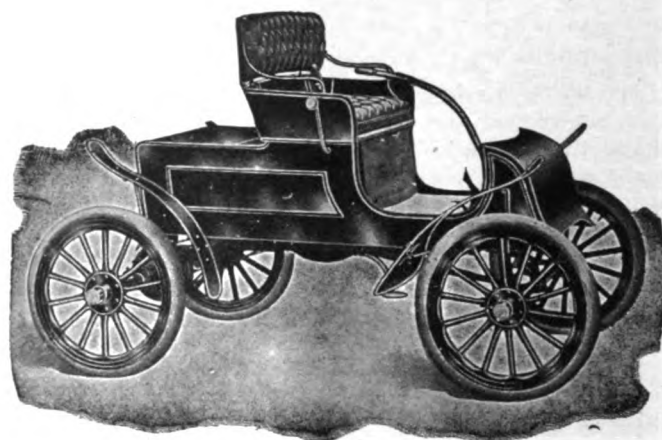
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NEW YORK, JULY 30, 1903.

### Suggestiveness From Abroad.

The Motor World's Paris letter, printed on another page, is of more than usual interest. It portrays graphically the change that has "come over the spirit of the public's dreams." The man in a motor car is, by virtue of the fact, no longer considered a malefactor, but is coming to be viewed as a citizen entitled to the full rights of citizenship.

The deliberations and transactions of the special commission comprising all classes of citizens designed to consider his claims to decent treatment cannot well fail to be of far-reaching importance. It is significant that the abolition of the speed limit, as already proposed in Great Britain, is likely to result, while the institution of automobile police, as described by our Paris correspondent, is plausibly made to appear advantageous rather than disadvantageous to the interests of users of motor-driven vehicles.

That France has seen the end of road

racing is made plain. The establishment of tracks and motordromes is in consequence but a natural inclination, and will do much to develop genuine sport and competition, as compared with the long-distance games of tag and tilts against the clock that have heretofore been accepted as the standard of automobile sport.

The change, though it is but in line with conditions prevailing in this country, will not be unwelcome. But in passing the astuteness of that rollicking old rake, the King of Belgium, cannot but be admired. The construction of a special road and the manner in which he turned to the advantage and profit of his country the suppression of road racing by other nations is detailed by our Paris letter, as is the "skill competition" which proved a feature of the Ostend meet. It appears to have been but an amplification of what we term "obstacle races," but an amplification so picturesque and entertaining that it should be imitated by the promoters of meets in this country.

### Spread of the Touring Spirit.

With the favorite touring month yet to come, this phase of the pastime has witnessed an expansion that is little short of marvellous. Hundreds of tours have been undertaken—from the ambitious transcontinental journey to the modest town-to-town and inland to seashore jaunts—and dozens of them have already been completed. From the participants comes but one story—that of genuine and almost unalloyed pleasure, induced by the general, frequently the conspicuous, success that has attended them.

More than six months ago the Motor World called attention to the remarkable unanimity with which makers were preparing for a big anticipated demand for touring cars, by exhibiting at the automobile shows cars with tonneau bodies or other means of seating parties of more than two. It presaged what has since come to pass, and our characterization of 1903 as a touring car and a touring year has been fully borne out by the event. The prescience of the designers and makers has been fittingly rewarded. Had they not started in time, the desire to tour that has since swept over the land would have been hampered, if not seriously checked, by the inability to procure touring cars; and the automobiling public deprived of the means of pursuing one of the most rational and enjoyable of pleasures.

It is noteworthy that in an overwhelming

number of cases the wives, daughters and sweethearts of the owners of touring cars have comprised the parties filling them. Parties of men tourists have been rare. The zest that femininity lends to a party of this kind has been generally recognized, and the recognition has been followed by action. Man's tendency to gregariousness has been nowhere more strongly evidenced than in the case under notice. The old saw, "The more the merrier" applies strongly here, and has even led—as in the Dill-Scarritt expedition—to a combination of different vehicles and parties, with the object of adding to the pleasure of the journey by embracing in the party as many congenial spirits as possible.

It remains to be seen, of course, whether the touring spirit is lasting or of an ephemeral character. So many people seek variety as the condiment that gives life just the desired spice that we may be pardoned our doubt of the enduringness of their devotion to touring. But a fair proportion of even the fashionable element will probably find sufficient diversion in it to continue to indulge in it. But the vast army of autoists are likely to be even more steadfast. The ever-increasing desire to get out into the open air, to visit places new and interesting, to enjoy at its best the pleasures of automobiling—all bespeak the continued popularity of this pastime that even yet is but little more than in its infancy.

### Steering-Gear Accidents.

By good fortune that seems almost providential, the ever-present danger of steering-gear accidents, with their long train of ugly consequences, has been almost wholly escaped. There have been many escapes, and extremely narrow ones at that; but almost without exception they have been productive of little harm. Frequently the occupants of the vehicle have been quite ignorant of the threatened danger.

It is to be said for the credit of designers and makers that precautions—in some cases extraordinary ones—are constantly taken against happenings of this nature. The most careful construction possible is to be found on most of the best makes of cars. A factor of safety enormously in excess of all ordinary requirements is provided at this point, and to it is due the immunity enjoyed.

There is little danger of overestimating the importance of the matter. The locomotive and the trolley car are held fast to a pre-



determined course by rigid rails; the horse-drawn vehicle is both steered and guided by the horse held fast in the shafts; the vessel with its steering gear suddenly disarranged can at least "lie to," and in this condition encounter little danger; but the automobile depends almost absolutely upon the proper working of its steering gear, and when it gives way the only hope of safety is to bring the car to a stop before any damage is done. At thirty or forty miles an hour, or even the legal fifteen or twenty, this is no small matter; and it is pretty good evidence of the reliability and dependability of steering devices that the imminent danger rarely eventuates.

### Not Merely a City Man's Vehicle.

In the minds of many persons the automobile is regarded as being chiefly the city man's vehicle. This view is much more widely held than the corresponding one that the self-propelled vehicle is the toy of the wealthy, or at least the well to do. It may come into use outside of the thickly populated centres eventually, but now, and for some time to come, its use must necessarily be restricted to the rich urbanite.

Nothing could be much wider of the mark than this summary of the matter. Whatever may have been the case in the early years of the automobile, it is now found in the country districts almost as much as in the city ones. In proportion to the population, it is probable that even now the former have a lead, and at the present rate of increase a marked advantage will shortly be obtained. The hundreds and even thousands of cars found in the large cities quite overshadow the ones and twos of the villages, but the aggregate of the latter is surprisingly large, and every well posted tradesman knows that the rate of increase is enormous.

There are perhaps fifty thousand automobiles now in use in this country, of which at least a fifth are to be found in this State. Probably half of the total number are owned by urban residents—the large towns only being included in this estimate. Two years ago, or even at the beginning of the present season, the showing would have been markedly different. A year hence it will have swung still further in the direction of the country districts. They will take an ever-increasing proportion of the yearly output of the factories, and this without any blowing of trumpets or other unusual manifestations.

In a recent talk with the sales manager of a Western factory we were informed that his concern's entire product could have been disposed of in one State—South Dakota. In that and neighboring States dozens of little towns and even villages had absorbed a few automobiles, ranging all the way from one to twenty-five or thirty. The purchase of one car was invariably followed by others, and each sale seemed to lead to more just as naturally as day follows night. Little towns that one rarely hears of were taking automobiles in carload shipments, and frequently the ability of the factory to supply was the gauge of the town's absorbing capacity.

This enormous—comparatively speaking—and ever-increasing demand is due to two causes: one is the utilitarian value of the automobile in places where horse travel has hitherto been the almost universal rule; the other is the abatement of the ruralite's hostility to "new-fangled" inventions.

The horny-handed son of toil, no less than the village denizen, now wants all the "latest improvements." An all-embracing prosperity enables him to gratify the new-found desire. Where he formerly was content to live as his fathers and grandfathers did, working hard and taking his pleasures in a very circumscribed circle, he now wants to partake of the same pleasures as the urban resident, and in the same way. His wife or daughter wants a piano, his son a bicycle, himself an automobile. The latter serves a double purpose: it furnishes pastime or sport, and supplies a long-felt and ever-present want—that of some speedy, reliable and ever-ready method of annihilating distance.

For these reasons the remoter districts are certain to take more and more automobiles as the years go by. The influence of each one will be beneficial, from whatever aspect viewed; and it will be only a question of time when the existing prejudice is reduced to a minimum or removed altogether.

### Effect on the Beef Market!

There is no connection between automobiles and the beef market that any ordinary observer would see, and yet a connection is perceived by some of those astute people who are continually bringing unrelated things together. They put the matter in an interesting way. Automobiles for freight and express deliveries, as well as for cab service, have diminished the number of

horses kept in the cities, and will probably do so to a much greater extent within the next few years. With a decrease of horses comes a lessening of the market for hay. In this year of a short hay crop the effect is not apparent, but in the next year of a full supply of hay it will be.

Farmers in the Kennebec Valley and other hay exporting sections of Maine, as well as in the other New England States and in New York, are already considering the problem that they will soon be called upon to solve. With high prices for beef, it is not unlikely that in the near future hay may be marketed less profitably in the city than by feeding it to young cattle and selling the cattle for beef.

The filling of the West with farms instead of cattle ranges, the organization of the beef trust and the introduction of automobiles are a combination of causes which may restore the herds of Durhams and Herefords to the hills of New England.

When we come to think of it, the number of serious breakages to automobiles is surprisingly small. Considering the excessive weight they have to carry, the strains and stresses produced by the engines and the severe use many of them get over abominable roads, they stand up remarkably well. Such alarming mishaps as broken axles, steering connections, etc., are rarely heard of, and the average autoist has come to regard himself as pretty nearly immune. This speaks volumes for the design and construction of the average automobile.

Why are streets and roads made high in the middle and sloping toward the sides? The answer is, of course, very ready: So they will drain well. But this convexity of outline is very hard on automobiles, which slip and slide whenever the road surface is wet. So why shouldn't they be made concave, the drainage being carried to the centre? Then there would be no tendency to slip, and in going around corners there would be banking to facilitate the operation; whereas, at present it is just the other way, the outside of the roadbed being lower than the centre.

To fully appreciate the changes that have taken place in automobile design, one needs to examine some of the early models that are now in use in the country districts. They resemble toys, so small and dumpy-looking are they.

# WHOLESALE RECORD BREAKING AT YONKERS MEET

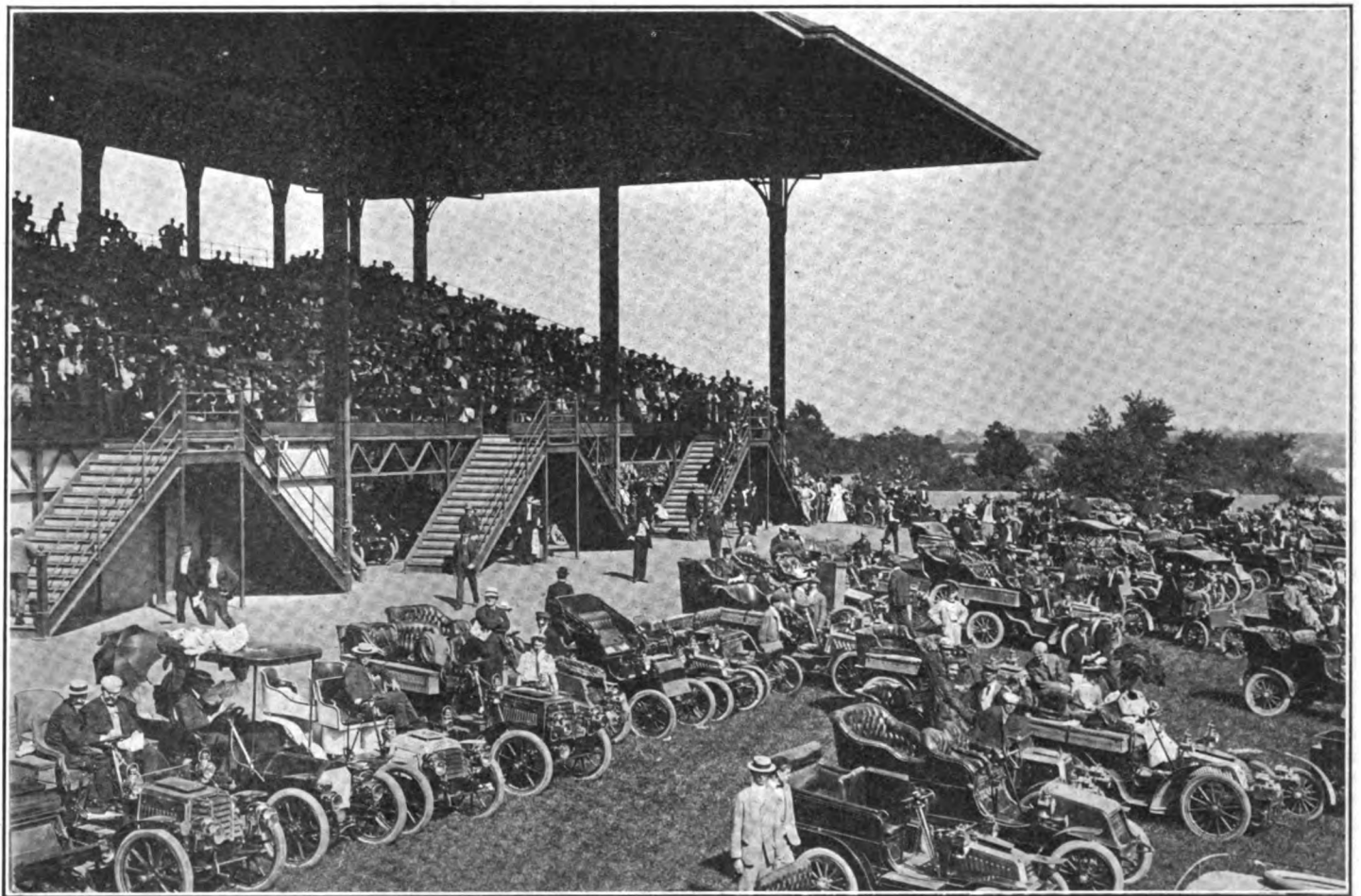
**Oldfield Brings Down the Mile to 55 4-5 Seconds and Also Wins his Match with La Roche, Creating Five Standing-start Records—Wilkinson, Sincholle and Grosso Also set up New Figures.**

"I can do a mile straightaway in forty-six seconds."

That was Barney Oldfield's reply to the congratulations which showered upon him at the Empire City track, Yonkers, N. Y.,

The exhibition was a superb one, and was conspicuously the feature of a meet which was brilliant in several other respects. The weather was perfect; the track was in as good condition as rolling and sprinkling could

standing here in the East while the chairman of the A. A. A. Race Committee was referee and all the officially recognized timekeepers were on hand. It was about 3 o'clock when his big red machine appeared on the track,



GENERAL VIEW OF GRAND STAND AND LAWN.

last Saturday afternoon, just after he had set a new automobile record for one mile on a circular track. Unperturbed, as if he had not a moment previously completed a ride which had held thousands of spectators almost breathless by its daring, he sat in his big 80-horsepower Cooper carriage (the famous "999"), mopped the perspiration from his face with a handful of cotton waste, and replaced in his mouth the big cigar upon which he had chewed while flying along the stretches and around the curves of the mile track. He had done the mile in 55 4-5 seconds—the second and third quarters in 13 seconds each. The former record for the track, made by Oldfield on May 30, was 1 minute 12-5 seconds.

make it; on the grandstand, on the balcony of the clubhouse, and all about the grounds were some six or seven thousand people, and crowded together wherever vantage ground was available there were by actual count 303 automobiles of every description, from the big touring car down to the airy looking little buckboard. Nor were these vehicles silent features in the scene when the air vibrated with enthusiasm, for their horns honked a strident accompaniment to the cheers of the admiring multitude.

Oldfield's attack on the mile record was made the second event of the afternoon, he having requested that this special feature of the meet be presented at this stage of the game because he wanted to settle his record

the Detroit motorist, bareheaded and clad in a flaming red leather coat, in the single seat, with a freshly lighted cigar in his mouth. Driving his car back to the seven-furlong post, he spent but a moment in his final preparations, threw his right hand up as a signal that he was ready, and in response to the waving of a red flag in the hand of Starter Picard, came down the stretch toward the judges' stand like a flash. Making for the outer fence he was going like a hurricane as he came opposite to the starter, who fired the signal, shot in response to his nod. Diagonally along the remainder of the stretch the red flyer made direct for the first turn, which was taken so daringly that while the front wheels appeared to be within a foot of

# ACROSS THE

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The remarkable performance of Dr. [unclear]  
who has just completed the first su  
ican Continent, was accomplished on

# GOODRICH CLINCHER

---

He made the entire trip, a di  
ON THE ORIGINAL GOODRICH T

The route being over the worst road  
Mountains, and the vast trackless

A Feat Unequaled in the

---

THE B. F. GOOD

AKRON RUBBER WO

NEW YORK, 66-68 Reade Street  
PHILADELPHIA, 922 Arch Street

SAN FRANCISCO, 392 Mission Street  
DETROIT, 30 E. Congress Street

CLEVELAND  
CHICAGO,

# CONTINENT

H. Nelson Jackson, of Burlington, Vt.,  
successful attempt to cross the Amer-  
ica in a Winton Touring Car fitted with

## AUTOMOBILE TIRES

distance of 3,428 miles, by road

TIRES, FITTED IN SAN FRANCISCO

roads in America, including the Rocky  
deserts of the West, makes this

### History of Pneumatic Tires

## RICH COMPANY

WORKS, AKRON, OHIO.

NEW YORK, 414 Huron Street  
CHICAGO, 41 Lake Street

BOSTON, 157 Summer Street  
BUFFALO, 9 West Huron Street

DENVER, 1444 Curtis Street  
LONDON, E. C., 7 Snow Hill

the inner fence the rear wheels skidded for several yards, sending into the air a heavy cloud of dust which struck the faces of the spectators at the rail like a sand blast. They fell back, some shrieking with an evident fear that an accident had happened, while in the view of spectators on the grandstand

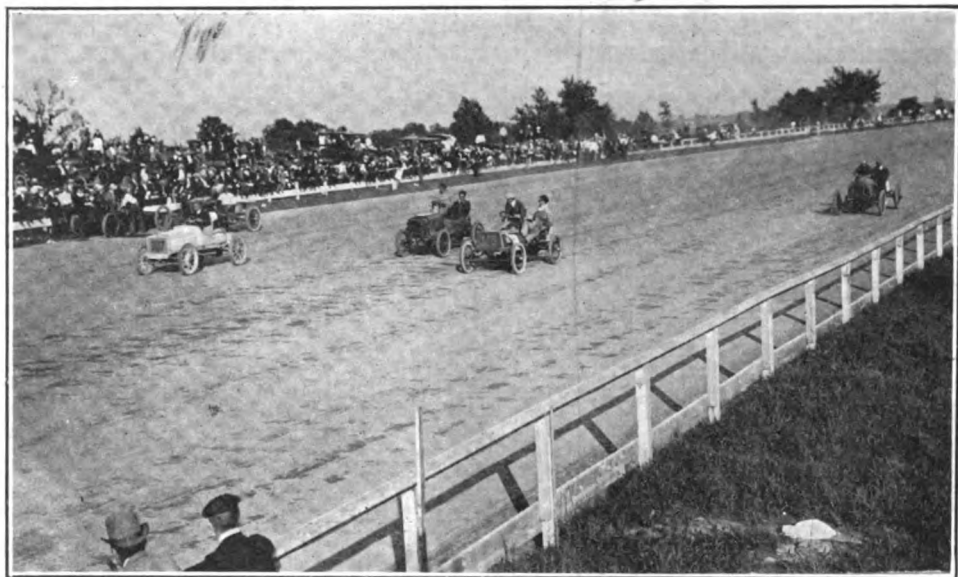
weighing under 1,200 pounds in one race, while in another race for similar cars new records from six to ten miles, inclusive, were made. The records from ten miles to fifteen have stood since 1901, when they were established by A. C. Bostwick. In the five-mile match race between Oldfield and La

not only in the breaking of the record, but also in the fact that an American made car of 10 horsepower beat a French made car of 16 horsepower.

The ten-mile match race was a lively contest all the way. For the first mile the three cars kept close together. Then the Franklin that won the first race drew gradually away, and ended by putting a second victory to its credit, and triumphing over a second foreign-made car, and adding five additional new records to its score.

The three-sided race between the Mercedes that is a sister car to the one Jenatzy drove to victory in Ireland, the Decauville that was in the Paris-Madrid race and the Peerless that Mooers drove in the Irish cup race was close for three-quarters of a mile. Then the Mercedes began to draw away from the Decauville, but slowly. The Peerless cup racer kept dropping back. At five miles Grosso, with the Mercedes, was leading by 200 yards and had made a new record of 5 minutes 28 2-5 seconds, beating Oldfield's record of 5 minutes 31 seconds, made on May 30. The car ran beautifully, with scarcely any noise, and won much applause as it sped smoothly along. At ten miles Grosso had a lead of a third of a mile, and after that the race was never in doubt, he winning by five-eighths of a mile.

In the match race between Oldfield and La Roche the former had it all his own way. In the first heat they started from opposite sides of the track, getting away evenly after one false start. In the first turn a screw of Oldfield's spark coil fastening jumped loose, and

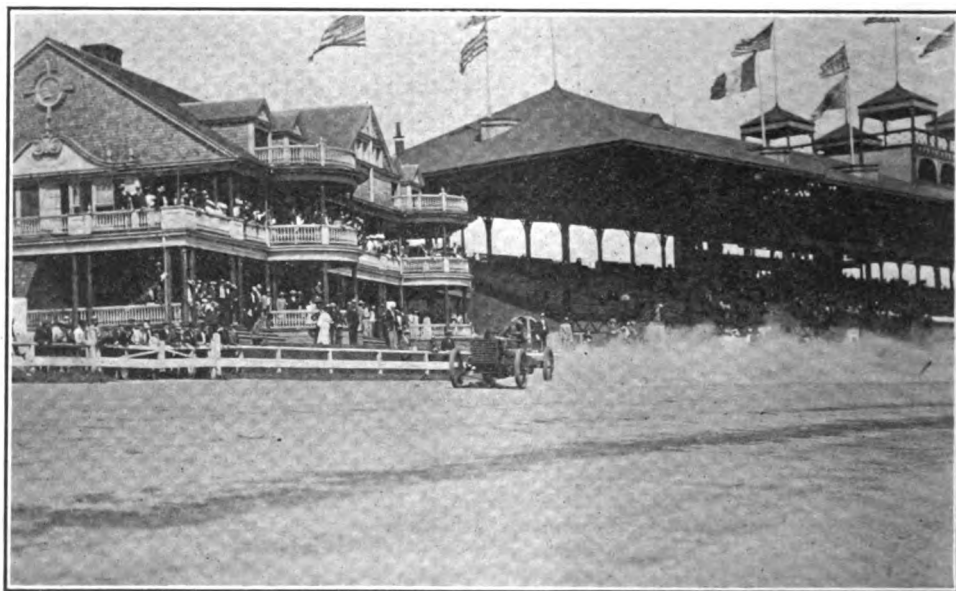


LINING UP FOR THE FREE-FOR-ALL EVENT.

Oldfield was speeding around the turn, never for a moment in the cloud of dust his machine raised; and by the time the rail birds were able to open their eyes again and see what was doing he was half way along the backstretch, going at a clip of about seventy miles an hour. Crouching over the lever, his hair streaming in the wind, his cigar pointing upward in the left side of his mouth, he was full of short, rapid body motions as he urged his big machine forward. The spectators were keyed up to an intensity of interest which was too great to permit a shout, but as the daring chauffeur came into the home-stretch with a speed which suggested that he had been shot from a mighty catapult there was a sound that can be described only as a muffled growl of surprise and expectation, which broke into cheers as Oldfield sped across the tape, and the figures on the judges' stand announced the time for the mile—55 4-5 seconds. Around the track once more sped the victor over Father Time, lessening speed by degrees until he came to a stop, by the outer fence in front of the grandstand, where an eager crowd rushed upon him to offer congratulations, or at least to get a near view of him.

Oldfield's was not the first record-making ride of the day, which was, as a whole, a day of new records. In five events new competitive records were made in all save one—the free-for-all, which was last on the card for the afternoon. Taken as a whole, the midsummer race meet was a thorough success. A new set of figures from one mile to fifteen, inclusive, was made for the heavy type of touring car; new figures from one to five miles, inclusive, were made for cars

Roche, miles in less than a minute were reeled off successively, and there was in all almost a surfeit of speed for the day. The excitement tired the spectators visibly, yet nearly all stayed till the end. In some of



OLDFIELD'S RECORD TRIAL, SHOWING THE WIDE TURNS HE MADE.

the races there was a close contest for a mile or two that kept the crowd on edge, but then it would string out as some machine let out a notch and took a lead that made it a sure winner, barring accident.

The first event of the afternoon was the five-mile race for cars weighing less than 1,200 pounds, and it was made noteworthy

he slowed and stopped. The officials called it no start. After they got away the second time, from a standstill, he began at once to eat up the distance that separated him from his competitor, and also to make new records from a standing start. Oldfield led at the end of the first mile by two furlongs, at the second by four furlongs; he caught

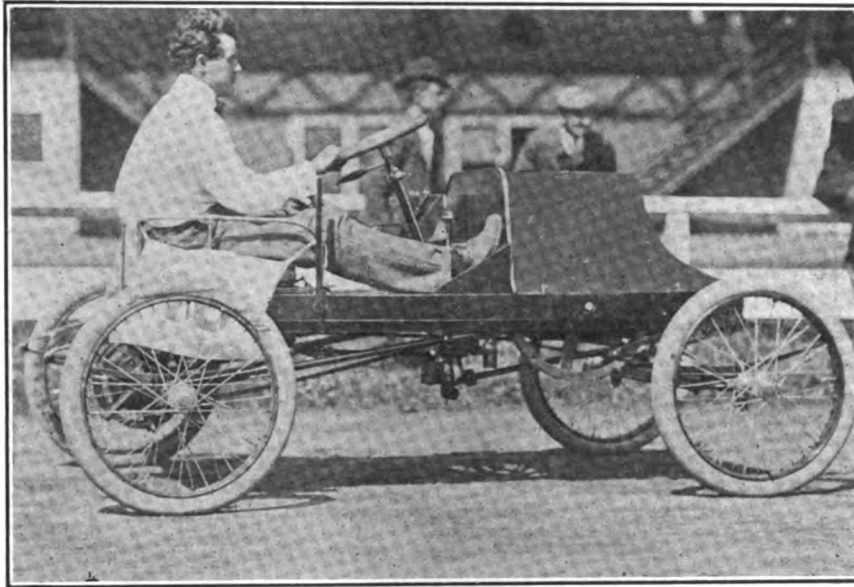


and passed La Roche in the fourth mile, and won by just about a mile. In the second heat he won a greater victory.

He gained steadily and won by a mile and a quarter, after reeling off the second mile in 57 2-5 seconds, the third in 58 3-5 seconds, the fourth in 57 3-5 and the fifth in

4-horsepower Orient, fourth; F. F. Goodman's 6-horsepower Northern, fifth. Time, 6:54 3-5. Time by miles, 1:25, 2:46 2-5, 4:08 2-5, 5:30 2-5, 6:54 3-5—all new records for this class of machine.

One-mile trial against time, by Barney Oldfield, of Detroit, with a flying start of a sixteenth of a mile—Time, 55 4-5 seconds;



JOHN WILKINSON AND HIS AIR-COOLED FRANKLIN.

58 4-5 seconds. His time for the five miles of 4 minutes 55 seconds is a new competition record, but against time Oldfield's record for five miles with a flying start is 4 minutes 54 seconds, made on July 4 at Columbus.

In the free-for-all four machines started, and for a couple of miles it looked like a sure thing for Herman's Panhard. This automobile had a valve break in the third mile, however, and then Sincholle with his Darracq took the lead. He led until in the sixth mile he tore a rear tire, and then Page, in a Decauville that ran "like grease," to quote the words of a grandstand enthusiast, went to the front and stayed there till the end, winning by more than a mile. Page drove his car to the end, going nine miles with his tire flapping about like a torn rag, and the crowd momentarily expecting to see him upset.

The one disappointment of the day was the calling off of the race for 24-horsepower Panhards. There were three entries, namely, by James Martin, jr., H. C. Haskins and C. V. Brokaw. As Mr. Brokaw's car was the only one of the three cars which put in an appearance, this race had to be eliminated. It had been anticipated by many as one of the most interesting events of the day, inasmuch as it was to bring into competition three cars of exactly the same make and power, which it was to be presumed would contend upon the most even terms possible.

Summaries of the various events follow:

Five miles, for machines of any motive power weighing under 1,200 pounds—Won by J. Wilkinson's 10-horsepower Franklin by three-quarters of a mile; Colonel W. P. Harlow's 16-horsepower Darracq, driven by L. O. Gitchell, second; F. A. La Roche's 12-horsepower Darracq, third; J. C. Robbins's

quarter mile, 15 seconds; half mile, 28 seconds; three-quarters of a mile, 41 seconds. Former record, 56 2-5 seconds, made by Oldfield at Columbus, Ohio, July 4. Former record for the track, 1:01 2-5, made by Oldfield on May 30.



JULES SINCHOLLE AND HIS RECORD-BREAKING 40-H P. DARRACQ.

Ten-mile match race between J. Insley Blair's 10-horsepower Renault, driven by Joseph Tracey, and John Wilkinson's 10-horsepower Franklin—Won by Wilkinson by a third of a mile. Time, 15:50 1-5. Tracey's time, 17:07 4-5. Time by miles, 1:27 3-5, 2:54 4-5, 4:23 4-5, 5:51, 7:25 4-5, 9:03 4-5, 10:43, 12:15 3-5, 14:48 4-5, 15:50 1-5—all new records for this class from six to ten miles.

Fifteen-mile three-cornered match race between O. W. Bright's 60-horsepower Mercedes, driven by Laurent Grosso; J. R. Chisholm's 40-horsepower Decauville, driven by H. Page, and C. G. Wridgway's 80-horsepower Peerless—Won by Grosso by five-eighths of a mile. Time, 16:10 4-5. Time by miles, 1:10 2-5, 2:14 4-5, 3:19 3-5, 4:23 4-5, 5:28 2-5, 6:33 3-5, 7:38 1-5, 8:43 1-5, 9:47 2-5, 10:51 3-5, 11:56, 12:50 4-5, 14:03 4-5, 15:07 2-5, 16:10 4-5—new world's records from eleven to fifteen miles, inclusive. Former record for fifteen miles, 19:10 4-5, held by Fournier.

Ten miles, for cars of any motive power weighing under 1,800 pounds—Won by Jules Sincholle's 40-horsepower Darracq, by a third of a mile; J. R. Chisholm's 40-horsepower Decauville, driven by H. Page, second; George Papillon's 35-horsepower Darracq, third; J. I. Blair's 35-horsepower Panhard, driven by Joseph Tracey, fourth. Time, 10:52 4-5. Time by miles, 1:13 4-5, 2:17 1-5, 3:21 1-5, 4:25 2-5, 5:29, 6:32 4-5, 7:37 1-5, 8:41 3-5, 9:47, 10:52 4-5—all new records for this class of machine.

Free-for-all, fifteen miles, for machines of any motive power and any weight, Oldfield and La Roche machines barred—Won by J. R. Chisholm's 40-horsepower Decauville by one and one-third miles; George Papillon's 35-horsepower Darracq, second; Jules Sincholle's 40-horsepower Darracq, third. Time, 16:39 2-5. Papillon's time, 18:18 4-5; Sincholle's time, 19:00.

Special five-mile match race in heats, between Barney Oldfield's 80-horsepower "900" and F. A. La Roche's 35-horsepower Darracq—First heat, won by Oldfield, by a mile; time, 5:9 4-5. La Roche's time, 6:18 1-5. Oldfield's time by miles, 1:11 3-5, 2:12 2-5, 3:12 2-5, 4:11, 5:9 4-5—new records from a standing start.

Second heat—Won by Oldfield, by a mile and a quarter. Time, 4:55. La Roche's time, 5:13. Oldfield's time by miles, 1:02 3-5, 2:00,

2:58 3-5, 3:56 1-5, 4:55—all new records. One-mile time trials—M. C. Herman's 70-horsepower Panhard, 1:05 2-5; Jules Sincholle's 35-horsepower Darracq, 1:15 2-5; John Wilkinson's 10-horsepower Franklin, 1:20 2-5; O. W. Bright's 60-horsepower Mercedes, 1:03 1-5; C. G. Wridgway's 80-horsepower Peerless, 1:09 3-5; H. Page's 40-horsepower Decauville, 1:07 1-5.

## DR. JACKSON ARRIVES

(Continued from page 659.)

short of 6,000 miles; the run to Burlington—for which we start on Thursday—will bring the total up to 6,000 miles.

"After leaving Sacramento the Sierras were approached, and we sought a good place to pass over them. Taking the advice of residents, we went further north, and finally got across at Anderson without any very great amount of trouble. The road, or trail, was not much to brag of, being narrow, tortuous and very stony and steep. The passage shook us up a great deal, and was hard on our tires. But we descended at last, and, striking north again, crossed the Oregon line just before coming to Lakeview. Beyond there we turned east along the Oregon Short Line Railroad. After leaving Pocatello our real troubles began.

"It had been our belief that the sand through the small Oregon desert would be our worst enemy, but it was not. It was pretty bad though. As long as we had a bottom under the sand we managed to do pretty well. But when we sank in nearly to the hubs—('And that was pretty often,' put in Crocker)—we had to get out the block and tackle and pull the car out. It was on this stretch, too, that we had our worst time about food. We were thirty-six hours without it, and just when matters were looking very bad we fell in with a shepherd, who gave us one of the finest meals we had ever partaken of.

"Before leaving Idaho we received an addition to our party. This was Bud, a bulldog, which I bought at Caldwell. No, it did not run after us, as the papers say. I saw and liked him and struck a bargain for him without much trouble. He proved good company, and seemed to enjoy himself hugely in spite of the discomforts of the trip.

"When we left the sand behind we thought the worst was over, and we would rattle along in fine style, having understood that the Wyoming roads were at least ridable; and they would have been a few weeks later, or at almost any time during the preceding five years. But, for our benefit apparently, there has been a number of excessively violent rainstorms—cloudbursts some people called them. This prevented our following the railroad, as we had intended doing; for the roads running parallel to it sloped toward the tracks and the water had banked up there until it was impossible to drive a vehicle through it.

"Then we were in a dilemma. We made use of cross roads whenever any favoring us were to be found; and where they were not we took to the fields or prairie and zigzagged as best we could. Sometimes we went north instead of east; at others we even went northwest, only to retrace our steps when the opportunity presented. Where the railroad went one mile we would frequently go five. This was kept up nearly all the way across Wyoming; and when we crossed into Nebraska it became worse instead of better. Here it rained constantly. The mud was a

cementlike mass that stuck to things like the best Portland. And it seemed to have no bottom. The car sank in it clear up to the battery boxes—that is, nearly to the tops of the wheels; and then we would get out the block and tackle and haul it out. One day we repeated this performance eighteen times; other days it would be from three to eight times. These places were locally termed 'buffalo wallows.' We wallowed in them, sometimes tearing down a section of fence or using sage bushes where there were no fences, and put them under the wheels to make a foundation.

"In many places, particularly in Wyoming, the little streams were without bridges, and we had to ford them. The banks were often steep and of soft material, and it was difficult to surmount them. Once we were stuck in a stream, as the picture shows, and three Italians came tramping along with heavy packs on their shoulders. They were bound for a place twelve miles beyond, and I told them that if they would pull us out of the stream I would carry their packs to their destination for them. They gladly consented, and then I carried out my bargain, although the packs each contained more than 100 pounds.

"When we reached Omaha our difficulties proved to be nearly over. The constant rains made the roads very bad, but after the buffalo wallows they were child's play. A few inches of mud made little difference to us then, and we seldom had to fall back on our faithful block and tackle.

"Our tires stood up remarkably well. I tried to get new spare tires at San Francisco, but was unable to do so. After crossing the Sierras the rear tires were practically useless, having been cut to pieces by the stones and rocks. I telegraphed for others, and the best that could be done was to take a pair of second hand ones off a car and send them to me. One of these was worse than those I had, so I used only one. A jagged stone had cut a piece bigger than my two hands out of one of the original tires, but by putting in a new inner tube and wrapping a piece of canvas around it we were able to get along with it.

"For some time we had a bad time with our tires, and finally, seeing that something must be done, I wired to the Goodrich people at Akron and had them send me an entire set of tires. These came all right—C. O. D., by the way, as did even the Winton parts sent me, so absolute a stranger was I to both concerns—and thenceforth I had no trouble. The rubber wore off at last—not on the tread, but on the sides, where the stones struck the tires and destroyed their beauty. But I never had to bother about tires again.

"Nor did the car give me much trouble. A broken bolt coming over the mountains, two connecting rod breakages and an axle nut dropping off and letting the balls out—this was the sum total. I telegraphed for new connecting rods and put them in with as little delay as possible; while as to the balls, an old mower yielded some to take their

place and Crocker and a machinist made a new cup and cone while we waited.

"At Fishkill Mrs. Jackson and my father met me, and from there I came on to New York without further incident. A good overhauling is being given the car at the Winton establishment here, and on Thursday I start for Burlington. That will bring our long trip to an end, and I will have the satisfaction of being the first to cross the continent in an automobile."

## Action to Follow Selden Warning.

Following the warning which the Selden association, as the Association of Licensed Automobile Manufacturers is for brevity's sake coming to be known, is publishing, the statement is freely circulating that the thumbscrews of the law will shortly be applied to those who fail to heed the warning.

It is also rumored that the first move may be made not only against the manufacturers involved, but against agents and individual owners, thus forcing the fight all along the line.

As the warning intimates that action may be taken not only under the basic Selden patent, but under some others of the patents owned by the members of the association, it cannot be definitely foretold what bolt or bolts of lightning will be hurled at the alleged infringers, though naturally the Selden is the expected bolt.

## Court to Pass on Repair Bill.

What should be the reasonable cost of repairing an automobile is a question which the courts of Cook County, Illinois, have to decide. The case is that of a disputed bill for about \$150. On July 16 Buckingham Chandler, a wealthy real estate dealer of Chicago, replevined his automobile in the Circuit Court from the firm of Hagman, Hammerly & Griffin, automobile builders. Charles Hagman, of that firm, explains the matter by saying:

"Mr. Chandler left the automobile somewhere north of Highland Park, and my partner, Mr. Hammerly, had to go out and get it. It seems that Mr. Chandler tried to take the machine apart. At any rate, when we got the machine in we had to build new parts."

The parts supplied, Mr. Hagman said, were a new pump, new burner, new cones and new back covering. The vehicle was newly varnished, also.

## Appraisal Raised on a Mercedes.

The reappraisal division of the United States General Appraisers has sustained an advance made by Appraiser Whitehead on a 60 horsepower Mercedes automobile from C. L. Charley, of Paris, June 25 last.

The car, which was entered on the invoice as possessing a value of \$11,000, was advanced by the local appraiser, whereupon the American representatives of the Paris manufacturer took an appeal to a general appraiser, whose decision sustains Mr. Whitehead's advance to the extent of \$12,465. It was learned that the importer added a considerable sum on entry to the invoice figures.

## FRANCE AND BELGIUM FIGURE IN FOREIGN NEWS

**While France Suppresses Road Racing, Belgium Encourages it, Constructing a Special Road for Automobiles and Holding a Memorable Meet at Ostend—  
France Appoints a Commission to Revise Laws.**

Paris, July 17.—The automobilist has been for so long a time worried and troubled by the existing regulations, which are variously interpreted by the different local authorities until he really never knows whether he is transgressing the laws or not, that he had almost given up hope of ever receiving the same treatment as any other user of the public highway. But it is a long lane that has no turning, and the automobilist thinks that the end of the lane, which has been metaphorically strewn with thorns, is now in sight. The idea is gradually soaking into the brains of our lawgivers that the owner of a motor car is, after all, a gentleman worthy of as much consideration as the coster who drives his donkey cart or the bohemian who saunters along the highways with a regular house on wheels that takes up more than half the width of the road; that he pays more for the privilege of using the road than any one else, and that, as a money spending tourist, he has an influence on local trade which should be encouraged in every possible way.

It has taken the legislators a long time to come round to this intelligent appreciation of the automobilist. He would probably still be laboring under the old delusion that the motor car driver is an exotic product of modern civilization, with his mental balance upset by the intoxication of speed. If it were not for the truth that has been forced upon him that the automobile industry is one of the biggest factors in the country's prosperity. The man who helps to make laws cannot get over the fact that the figures relating to automobile production, exports, wages, etc., are growing at a phenomenal rate. He is still more impressed by the increasing revenue which the government derives from automobile traffic, and when this revenue swells up to millions of francs, and is likely to go on swelling indefinitely, the government begins to look into the ways and means of fostering this unlimited source of funds. Wherefore the snarls and curses and occasional flights of brickbats that used to be the lot of the automobile have given way to professions of zeal for the development of the movement. The men who own cars are worthy citizens who need encouragement and protection because they do their duty toward their country by pouring shekels into the State coffers, distributing them in wages and putting them into the pockets of hotel-keepers and others, who are at length beginning to find fortune smiling upon them.

It is in this spirit of conciliation that the government recently appointed the "extra-parliamentary" commission to draw up a new set of automobile regulations, which are

to be adopted uniformly all over the country. The commission is a large one, and is composed of representatives of all classes, from automobile users to pedestrians, and it may therefore be expected that the long deliberations of this body will be carried out in a perfectly unprejudiced and impartial manner, when the arguments of one class will be met by the arguments of another, and a satisfactory compromise come to between them. The matter is so vast, and is likely to give rise to so much discussion, that it will probably be a long while before the commission has terminated its labors.

Meanwhile some idea may be obtained of the general lines of the commission's deliberations by the statements just made by one of the presidents, M. Pierre Baudin, a former Minister of Public Works. According to this gentleman, there are two rational measures to be adopted for giving satisfaction to all parties. One is the creation of a brigade of automobile policemen, who are to be provided with cars by the government, so that they can patrol the chief highways. Owing to the distance they can cover in the course of a day only a comparatively small number of them would be needed for the supervision of all the main roads in the country. The cost of this brigade would not be very high, and could easily be borne out of the revenue arising from the taxes on automobiles. By placing the control of the routes in the hands of policemen accustomed to the driving of automobiles, the tourist would be sure of not being interfered with unnecessarily. The policeman who is an expert automobilist would judge instinctively whether a car was running at a dangerous speed or not. He would not be called upon to estimate whether a vehicle was running beyond a certain legal limit; he would merely have to appreciate the existence of danger to the public, though for purposes of conviction this appreciation would certainly have to be based upon sufficient grounds. Under these circumstances the policeman would be far less inclined to interfere than if he were required to stop drivers who seemed to be transgressing the speed regulation.

The other point insisted upon by the president of the commission is the necessity of absolutely suppressing the use of racing machines on the public highways. In a general way he is in favor of limiting the powers of automobiles. He does not think that it is desirable, or even possible, to fix an actual limit to the powers of motors, but he suggests that certificates should only be granted for business and pleasure cars, to the exclusion of the huge machines which are constructed

solely for speed, and not for touring purposes. At the same time he is in favor of the total suppression of the present arbitrary speed limit of nineteen miles an hour on the country roads. If the automobile is to develop it should be capable, he says, of maintaining an average speed of from nineteen to twenty-five miles an hour on all sorts of roads. Since, however, the driver is to have a very wide latitude as regards speed special precautions will have to be taken to insure that he possesses the necessary skill. The granting of driving certificates should be placed in the hands of the automobile clubs, who would be, to a certain extent, responsible for the drivers, and they would therefore have every incentive to make the examination as strict as possible. In case of serious accident an official inquiry would be carried out, and the report published showing whether the accident was due to the mechanism or to the driver's want of skill. In the latter case he would lose his certificate. It is impossible to say how far the president's views are shared in by the other members of the commission, but they are at any rate interesting as giving some idea of the methods suggested for regulating automobile traffic in a way to give satisfaction to all parties.

One thing is certain. The new regulations, while giving plenty of freedom to automobilists, will absolutely condemn excessive speeds. This is the only means by which the various interests on the commission can be conciliated. They will suppress racing on the public highways in any shape or form, and the sport will have to be relegated to inclosed tracks. The owners of racing cars have resigned themselves to the inevitable, with the satisfaction that the changed condition of things will, at all events, provide them with more sport in the future than they have had in the past, though racing around tracks may not be so exciting as a straight-away event of some hundreds of miles over the public roads. Negotiations are in progress for the acquisition of several large properties in different parts of the country for the laying out of tracks or motordromes, and the first of them to materialize is a motordrome near Champigny, about twenty miles to the east of Paris. A wealthy syndicate bought some land at this place for the laying out of a racecourse. The suppression of automobile racing then suggested to them that it would be a good speculation to increase the area by buying up an adjoining property and convert it into a combined racecourse and motordrome. It is not yet known what will be the size of the automobile track, but it

is likely to have a circumference of several miles.

The only country where racing is now tolerated is Belgium. All over the rest of Europe speed events have been put down with a firm hand, the government of Italy having followed the example of France, Germany and England by prohibiting the annual hill climbing race from Suse to Mont Cenis, as well as the kilometre tests at Undine. The only place in Europe where racing is authorized is the Belgian Ardennes. The King of the Belgians, who is himself a confirmed automobilist, was prompt to see the advantages that would be gained by diverting the current of automobilism into his country, and he has done an admirable service for Ostend by converting that fashionable watering place into an automobile centre. So far as vehicular traffic was concerned Ostend was practically isolated from France by the bad state of the granite paved roads. The King therefore decided to put the city into direct communication with the north of France by constructing a road specially for automobiles from Ostend to Menin. The road is of macadam, straight and perfectly level, and the automobilist has the satisfaction of knowing that he is on his own route, where he can drive at any speed he likes without let or hindrance. This is the first purely automobile road constructed in Europe. Perhaps it is a precursor of many others.

The new automobile road is being inaugurated this week by a great automobile meeting at Ostend, where an extremely interesting programme has been drawn up by the Automobile Club of Belgium. The attendance of motor vehicles is enormous. Every one appears to be there, and it is generally admitted that Ostend has entered upon a new era of prosperity, thanks to the automobile. There is plenty of variety in the programme, comprising as it does speed tests on the new road between Snaeskerke and Nieuport, tests of touring carriages, skill competitions, floral decorations, and in fact, everything that can make the sport interesting for the public. On the first day there was a ten kilometre speed test from a standing start, when the best time was done by Herr Willy Pogge, on his 60 horsepower Mercedes, who covered the distance in 5:13 3-5, beating Salleron on his big Mors by 3 1-5 seconds. A 110 horsepower Gobron-Brillie was third, in 5:29, followed by the Mors of Jean de Crawhez. A Gardner-Serpollet steamer, driven by La Elon, took 6:6. The record was beaten by Gabriel, on his Mors, but as the car was entered in another name he was disqualified, though of course this does not diminish the merit of the performance. The Darracqs beat records in both the light carriage and voiturette classes, Béconnais doing 5:23 and Villemain 6:11 3-5. The following day the touring cars were tested over a five kilometre course from a standing start, when Willy Pogge on his Mercedes, with four passengers, again carried everything before him by covering the distance in 2:50 4-5. The Gardner-Serpollet of Caillols was second in 3:35 1 1/2, and then came the Pipe of Hautvast,

in 3:39 3-5. Twelve cars covered the five kilometres in five minutes and less. The performance of the Mercedes is remarkable, representing as it does an average of nearly sixty-five miles an hour, with a full load, from a standing start.

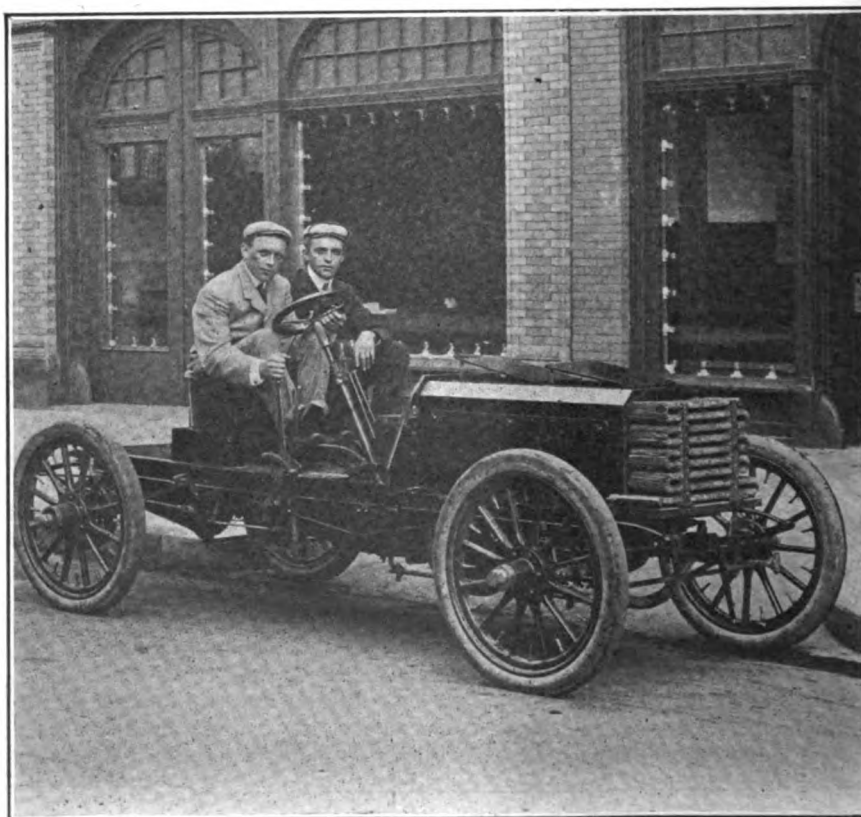
Nothing was more amusing for the public than the skill competition which took place on the Wellington racecourse at Ostend. Whether it was equally amusing for the competitors was another matter. In any event, it showed the possibilities of the automobile as a source of entertainment, and the uproarious laughter of the spectators made it evident that an enterprising promoter can do many things worse than organize meetings in which the pleasure of the onlookers is combined with the serious business of driving cars under the most awkward conditions possible. They had to be driven in and out of a maze, up a steep bank, when many of the competitors rolled back, to the delight of the crowd; between sticks planted in the ground, and explosive balls that went off as soon as they were touched, and had to avoid dummies that danced on wires in front of them. Altogether it was an extraordinary test of skill in which the cars with a long wheel base did not have the slightest chance. They could not steer sharp enough, and made sad havoc with the obstacles. The maximum number of points awarded was 100, to which 10 were added for the fastest time. The only competitor to get through the test without a hitch of any kind was Pierre de Crawhez, the winner of the Ardennes Circuit, and as he made the best time he got the maximum number of points. He drove a small 8-horse-

power Panhard car. De Beukelaer, who piloted a 16-horsepower Vivinus car, was second, with 90 points, and De Liederkerke (Vivinus), Joostens (Clément), Jean (Pipe) and Huet (Peugeot) dead-heated with 85 points.

Another interesting event that took place on the automobile road at Snaeskerke was the mile test from a standing start. Willy Pogge started with his Mercedes, having on board an amateur mechanic, who lost his head and clung to Herr Pogge's arm so that he had to stop. Rigolly got off well with his 110-horsepower Gobron-Brillie car, and did the best time, in 58 4-5 seconds. The next best time was done by a light Darracq driven by Baras, in 1:03 3-5. The kilometre test which takes place to-morrow closes this series of events. The meeting has been remarkably successful in every way, more so than could have been anticipated, and with such admirably organized events as the Ardennes Circuit and the Ostend meeting, Belgium promises to become a big centre of automobile sport. It is true that it is not likely to find much competition from elsewhere.

#### Ashamed of his Own Law.

At the recent banquet of the Worcester (Mass.) Automobile Club one of the after-dinner speakers was Representative Phinney, of Lynn, who was introduced as the father of the present Massachusetts law relative to automobiles. He told of the fight in the legislature to get a bill through that would be at least partially satisfactory to the automobilists. He said the final condition of the bill was such that he was ashamed of it. It was full of holes, and some of them he had been instrumental in making. He said he did not know of any better way for a man to show his ignorance than to try to interpret the new automobile law.



THE BANKER BROTHERS, GEORGE AND ARTHUR.



## NOW IN NEBRASKA

**Packard Overland Tourists Making Good Progress After Much Rough Travel.**

North Platte, Neb., July 28 (By wire).—The Packard overland tourists reached here today, thirty-eight days out from 'Frisco.

Denver, July 21.—The Packard transcontinental travellers, E. T. Fetch and M. C. Krarup, arrived here yesterday afternoon. When eighteen miles from the city they were met by the Packard agents, and nearer town by a party from the Denver Automobile Club. Four Ramblers, two Locomobiles, a White and a St. Louis car in the party attested that the welcome was not that of a "family party."

The ride across Nevada and Utah was one to try men's souls. Sand—deep sand, sagebrush and boulders constituted the major portion of the route, but the men and the car proved equal to whatever emergency arose.

The character of the sand was exemplified by what occurred at Wadsworth, Nev. When the car left that place many of the town-people had gathered at the top of one of the many ominous sandhills that almost inclose the town, one of the citizens having brought a team, rope and tackle that he expected would be called into requisition for drawing the automobile over the difficult spot, but provision has been made for such emergencies. The car carried two strips of canvas, each twenty feet long and about six feet wide,

with the idea in view that, if traction failed in deep and dry sand, the canvas could be spread over the ground and the car be driven over without sinking into it too deeply. This plan was carried out, and it was with boundless surprise that the Wadsworth people saw the car rise slowly but surely over the steep grade and finally pass by them. For more than ten miles thereafter the road lay through deep sand, and twice more recourse to the canvas was had in order to pull through. A little canvas awning had been built out over the front end of the car to shield the cooling coils from the direct rays of the sun, but even with this precaution it proved necessary to go even more slowly than the sand compelled so as to avoid overheating. So fierce was the heat, so still the day and so unceasing the hard work imposed upon the motor.

About three hours and a half elapsed before the car had traversed the first twelve miles out of Wadsworth, and an idea may be formed of what this kind of sand means to the motor tourist when it is noted that on a 14 per cent downgrade it was necessary to drive on the low gear in order to reach the bottom; the car refused not only to coast, but none of the higher gears would budge it. Late in the afternoon the first tire accident took place, due to a nail in a board lying in the road. Twenty minutes was required to pull out the injured section of the inner tube, put a patch in it and get it back into place.

Between Mills and Winnemucca it was known that more sand of the sort existed. Accordingly the tourists headed for the

mountains through the pass at Dun Glenn. The roads were steep and winding and overlooked ominous caverns, but they were negotiated without accident. After descending the pass sand was again encountered, but the delightful discovery was soon made that where the sand was deepest and most impassable the enterprising citizens of Winnemucca had sent out their squad of road improvers, who had cut down the sagebrush on both sides of the track and spread it over the sand, turning it into what is locally called a "brushed road." The effect of this improvement was far superior to corduroying, as the soft sagebrush wood soon splinters into shreds and makes a soft and pliable roadbed. For nearly four miles the roads have been so treated.

Later, in Utah, the tourists made good use of this idea. In the swamps they strewed the "road" with brush to prevent the wheels from sinking up to their hubs in the salt marsh. In Utah, the supposed impassable Soldiers' Canyon was negotiated despite its tangle of trees and boulders, although there were times when it was necessary that the boulders be rolled aside before the car could advance, just as there were times when the thick brush had to be cut away with axes; also there were occasions when bridges had to be builded of railroad ties or sand, and hills "fixed" so that the wheels might obtain a grip on "mother earth." In Castle Valley, Utah, there was one grade of 37 per cent that the car climbed from a standing start.

From Reno to Colorado Springs the car carried an extra passenger, N. O. Allyn, an expert machinist, who had followed the tour-



ROUGH GOING IN SOLDIERS CANYON.



PULLING OUT OF A UTAH SWAMP.



ists from 'Frisco by rail. He rode on the rear of the car on top of the baggage, and while his services as machinist were not required, he was of prime assistance when there were roads to be "improved" or bridges to be built.

### The Tilt Over Jenatzy Tires.

The claim made that Jenatzy, the winner of the Bennett Cup race, used Michelin tires in that event has brought the two big European tire companies, the Continental and the Michelin, into such sharp conflict that the Continental people have made a formal demand that the statement be retracted. The American agency for the French tire was this week called on to "take back" what it had said on the subject, and, failing a retraction, it is implied that other steps will be taken. How the claim ever originated is difficult to understand. The rules of the race required the use of German tires, and every one connected with the race was well aware that not only Jenatzy's car, but the other two Mercedes were equipped with Continentals, which scored "first blood" in this country at the Empire City meet on Saturday last. But two cars engaged were fitted with the German tires, and each placed a victory to its credit, one of them, Mr. O. W. Bright's Mercedes, creating several new records in doing so.

### Held up by Edison's Battery.

Gothold Frankel, who is said to be a New Yorker, holds a concession from the municipality of Buenos Ayres for a line of public automobile omnibuses to be run in the streets of that city. It was his intention to employ electricity as the motive power, and he had pinned his faith on Thomas A. Edison's ability to devise a light electric accumulator; but his concession expires in November unless he begins to operate his line before that time, and he has therefore decided to use gasoline. With that in view, it is reported, he has made a tour of the United States and Europe, studying the various types of gasoline vehicles, the result being that he has placed his orders abroad instead of in this country. His orders include ten vehicles from the Durrkopps, of Germany, and ten Serpollets from France.

### Suit Caused by a Crack.

Along "automobile row" the gossips are talking about a disagreement between one of the stores and an irate customer. So acute has the matter become that it has been placed in the hands of a lawyer by the customer, and unless the concern makes amends it will come to suit.

It appears that a light racing car—one of the Paris-Vienna participants—after passing into the hands of an American temporarily sojourning in Paris, was sent to this country to be sold on commission. After some little time a customer was secured, and the sale was almost consummated when the prospective purchaser noticed a spot of rust on one of the cylinders. He called attention to it, and was told, so he avers, that it was caused by a leak in one of the radiator pipes. Satisfied on this point he paid his money—about \$8,000—and took the car. Shortly afterward a closer examination of the rusty spot made it plain that the wall of that particular cylinder was cracked—a discovery that was anything but pleasant to the newly made owner.

Back he posted to the seller and stated the facts. The crack must have developed since he bought the car, he was told; at any rate, it was sold "as was" at a greatly reduced price, and there was no redress. In vain the owner stormed and threatened to invoke the law. He was politely informed that he could do anything he wished—except get his money back. He was out that and in an automobile that was all right at the moment, but which might at any moment become all wrong. To replace the cracked cylinder was an expensive job—involving a cost of several hundred dollars—and, worst of all, a delay of many weeks while a new cylinder was being procured from "the other side."

Unpleasant as it was, such was the situation. Only the courts can untangle the knot, and there is no telling how soon they will pass upon the matter. It is a foregone conclusion, however, that the next sign of rust on a car the victimized one is contemplating buying will be scrutinized very closely and diagnosed in an unequivocal manner.

### Stole a Car "For Fun."

"Set a thief to catch a thief," the old adage runs, and in a slightly different form it was illustrated at Buffalo last week, when an automobile thief was pursued and caught in a second automobile. An automobile belonging to the Cantor Vehicle Co., and valued at \$850, was stolen from the front of the store.

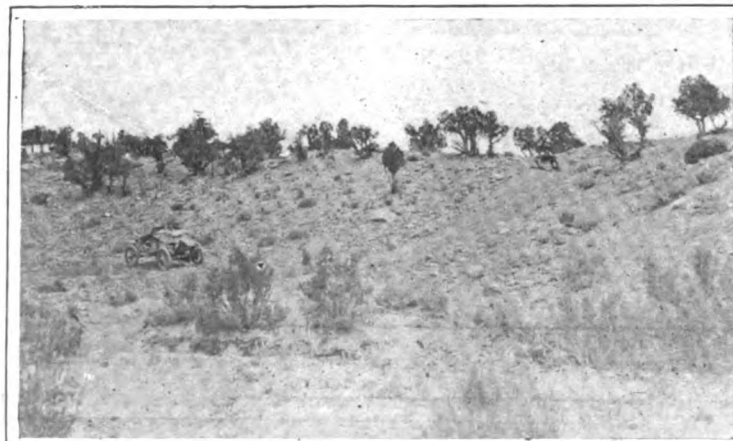
The manager of the Cantor Vehicle Co. told the police he suspected William G. Cross, a man who had worked for him as repairman for a week. Detective Edward Newton was the only officer available at the time. The manager took him in a fast touring car for a ride about the city. It was thought that Cross might be seen some place.

Manager and detective sped around the city boulevards out to the park, in Main street and out to South Buffalo. Coming from South Buffalo, they rode up Michigan street from Seneca. At South Division street the automobile man sighted an automobile crossing North Division street at Pine. All speed on, the two men went to Pine street, and there found in front of a saloon the automobile for which they had been searching. Detective Newton went inside. Evidently Cross suspected his mission. He and his companion hid in a side room, but were soon dragged to light.

With Cross when he was arrested was Loren C. Walker, who was a salesman for the Cantor Co. for a while. Both men were taken to the Franklin street police station and charged with grand larceny, first degree. Cross and Walker claim they took the automobile for the fun they could have around the city. They intended to return it, they say.

### The Call for Whites.

Manager George H. Lowe of the White Sewing Machine Co., Boston branch, is one who has no complaint to make of midsummer dullness. "We have had eleven customers in the store this morning," he said to a Motor World representative on Monday, "each of whom has a White touring car on order with a deposit made. The best the factory could do was to send me five cars, which went not quite half around."



REMOVING BOWLDERS FROM THE OVERLAND PACKARD'S PATH,

BOWLDERS AND MORE OF THEM.

## EXPERTS DISCUSS MOTORS

### Combustion, Cylinder Heads, Valves, Fly Wheels, Piston Speeds and Mixtures Receive Attention.

Paris, July 17.—Continuing the summary of the proceedings of the International Automobile Congress, which was given in a former letter, when we dealt with the present position of steam motor cars, we now come to the report of M. F. Gaillardet upon gasoline motors. This authority has a good deal to say about the progress of the internal combustion engine since the last congress, in 1900, and his report is remarkable as giving for the first time something like a definite theory of the gasoline motor based upon a long series of careful experiments. It may be that his theory may not be generally accepted without some reservation, and in the discussion that followed it came in for a good deal of criticism; but there is no doubt that M. Gaillardet's conclusions explain a good many things that have hitherto puzzled the motor engineer.

In order to properly design a motor it is of course necessary to know the precise action of the explosive mixture. But this is what no one has yet been able to tell us. Up till a year or two ago it had always been supposed that the combustion of the gas molecules was propagated throughout the mass in an appreciable lapse of time, thus causing a rapid expansion of gas and consequent pressure upon the piston. This seemed to be explained by the theory that the electric spark ignited the molecules in actual contact, and that these, in their turn, spread the ignition to the surrounding molecules, and so on until the whole charge was burnt. Of course, there can be no doubt that this is what actually takes place, and it is well understood that the closer the molecules are brought together by higher compressions the more rapid is the combustion, since there is in this case no resistance to the passage of heat between the molecules such as would be experienced if the molecules were surrounded by an air medium.

It has been supposed that a rapid combustion meant an expansion of gas. But M. Gaillardet's experiments seem to show that this is not the case. He has been trying the effects of the charge in a single motor with different forms of cylinder heads, and he finds that the best results are obtained by concentrating the charge over the piston. This is not exactly a discovery, since the late M. Buchet designed his motors upon this principle some years ago, and got excellent results by concentrating his charge and exploding it immediately above the piston. Other makers have been doing the same thing in a more or less modified form.

The merit of M. Gaillardet's experiments is that they have enabled him to formulate a theory that the internal combustion engine is a purely explosion motor in which the gas molecules undergo a sudden dilation, and

he compares the effect to that produced by an infinity of small springs suddenly let loose. There is consequently a shock or impact upon the piston. The energy produced by this sudden dilation of gas molecules is not, he says, all utilized, because the effort produced upon the cylinder walls is practically lost, and the only part utilized in actual work is that which acts directly on the piston, assisted by the shock against the cylinder head. Briefly, therefore, it may be said that there is nothing in M. Gaillardet's theory to controvert the usually accepted idea that the heat is communicated by one molecule to another, or rather by a mass of molecules to the mass immediately surrounding them; but the heat is propagated with such rapidity that the molecules throughout the charge expand, as it were, instantaneously, and thus produce a violent shock of extremely short duration.

While it is very desirable to concentrate the charge above the piston it is found necessary in practice to have a small side combustion chamber to protect the valves from the lubricating oil and also from the heat developed by the explosion. Nevertheless, the inlet valve should be sufficiently large to prevent wire drawing, but the lift should not exceed three millimetres so that it will close promptly and prevent a backward rush of gas, which expands directly it comes in contact with the hot cylinder walls.

M. Gaillardet gives some very interesting data concerning the dimensions and construction of the various parts of the motor, and he insists upon the necessity of giving more attention to the flywheel which, he says, should be looked upon as an accumulator of energy capable of giving up a certain part of its energy to overcome inertia when starting a car. In other words, more power may be needed to start the car than that developed by the motor itself, and thus during, say, a quarter of a second the energy stored up in the fly wheel is added to the power of the motor to move the vehicle. For this reason the weight of the fly wheel should be calculated according to the inertia to be overcome, that is to say, the weight of the car and the speed at which it is started.

We have already seen that M. Gaillardet is in favor of high compressions on account of the higher efficiency it gives to the engine, but in practice it is impossible to exceed a certain limit because very high compressions would mean great difficulty in starting the motor and in regulating the admission, while with small fly wheels the force of the shock would cause the motor to run irregularly, and it would be nearly impossible to avoid leakages at the valves and joints. For these reasons the compression ought not to be much more than five kilos per square centimetre. He also concludes that the motor gives highest efficiency with a comparatively long piston stroke and high lineal speed, and in this respect he is somewhat at variance with current practice which gives a preference to short stroke motors.

In the discussion that followed some mem-

bers of the congress seemed doubtful about accepting the theory that the fly wheel should be calculated according to the weight of the car. The idea was a novel one, and it took some time for the congress to see that there was something in it. M. Forestier, the general secretary of the congress, and inspector general of the Ponts et Chaussées, changed the course of the discussion by raising the question whether it was preferable for an automobile engineer to turn his attention to the explosion or combustion engine. Opinion was still divided as to the category in which they should place the gasoline motor, but the success of the Diesel combustion engine had suggested to some makers that it would be better to work out the automobile motor on these lines.

M. Max Richard then opened the debate upon the advisability of using long or short piston strokes and slow and fast running. He said that makers' ideas differed a great deal upon these points. M. Bocandé showed how little automobile engineers really knew about the matter by asking what was the relation between the piston speed and the power of the engine. M. Mors said that this depended upon the ignition. M. Bollée remarked that he had made engines of all speeds and all sizes and none of them had agreed. He found that the motor couple is about constant up to 900 revolutions and then falls. This was also the experience of M. Brillié. M. Richard, however, pointed to the Renault motor, in which he said the power increased in proportion to the speed up to 1,800 revolutions, and he, therefore, concluded that it was advisable to build high speed engines, but M. Bollée insisted that the maximum motor couple could not be obtained at extremely high speed. M. Forestier thought that the matter depended upon the quality of the mixture. M. Bollée said that he had got different results with different mixtures, except when he used mixtures of one of spirit and nine of air and one of spirit and sixteen of air, when the results were absolutely the same, and he could only conclude that one was an explosion and the other a combustion mixture. Between the two he got practically nothing. Of course, the mixture differed a great deal with the method of ignition, for they could not use the same mixture with the magneto as with the secondary battery.

The progress of the gasoline motor since 1900 was also dealt with from another point of view in the report of M. F. Drouin, who said that in its main features the motor had not undergone any change, but it had been considerably improved in detail, with the result that it had been given a much greater elasticity. The motor of to-day is a variable speed engine which has the advantage of simplifying the change speed gear, reducing the strain on the clutch, and being more economical under small loads. As regards efficiency and regularity, however, the difference between the motors of 1900 and those of to-day is scarcely appreciable, but the advance in the way of elasticity is considerable, and all the details of construction, such as the arrangement of the valves, pipes, water circulation, ignition, lubricating, etc., have considerably improved. The power of the engines has increased in the same time from 25 horsepower to 100 horsepower, while the weight has been reduced from 10 kilos per horsepower to 3.6 kilos per horsepower.

### Astoria Ferry Still Obstinate.

One of the few New York ferries which still decline to carry automobiles with full gasoline tanks is the one that runs from Astoria to the foot of East Ninety-second street, Manhattan. The line is owned by the New York and East River Ferry Company, and they have never changed their rules since the government amended the rule that permitted automobiles on ferryboats with full tanks. Before that change all automobilists had to empty the tanks of their machines and push their cars on and off ferryboats.

The Astoria ferry has never changed the old rule against automobiles crossing on the regular passenger boats, and now there promises to be a lively effort to induce the company's officials to change their minds and rescind the rule. Automobiles are not only multiplying in Long Island City, but the roads about Astoria have been improved, and it would be a short cut to Long Island from uptown Manhattan to have the ferry company raise the barrier against the autos. Business men, as well as residents of the upper districts there, are in favor of the company doing away with the rule.

There is talk in Astoria of getting up a petition and placing it at some point where automobiles pass, so that owners can see it and sign their names. It is believed that if the matter is put strongly before the officials of the ferry the desired result will follow.

### Providence has a "400."

Providence, R. I., keeps pace with the large growth of interest in the automobile, and it is estimated that the number of cars owned in that city and vicinity is in the neighborhood of four hundred. The increase for the current year is put at nearly 70 per cent over last year. New machines are continually arriving, and some of the dealers find it difficult to keep up with their orders. One of them reports having disposed of 106 carriages since last September.

Among new machines received in Providence last week were a Chelsea electric for Harry Huestis; a Covert for T. J. Thurston; Cadillacs for J. C. Gallup, George B. Arnold, H. N. Francis and Clinton E. Walsh; a Rambler for Charles H. Hoxie; a Waverly runabout for T. S. Vanderhoef, and a Toledo gasoline touring car for Fred L. Sayles.

The new car bought by Mr. Sayles is one of the largest and most elaborate owned in Providence. It has seating capacity for five persons, two in front seat and three in tonneau.

### Banker Again Defies the Police.

There is no love lost between A. C. Banker and the policemen in Chicago. The Wabash avenue automobile dealer is defiant of the power of the policemen to arrest him, and they, in turn, are not anxious to run him in until the Appellate Court passes upon the question he has raised for it. It will be remembered that several weeks ago he secured an injunction restraining the city from preventing him from using his automobile.

He had a little tilt with a policeman last Thursday when the officer, who saw no number on his automobile, stepped up to him and demanded to know why there was no number placed as the law required. Mr. Banker told the policeman very plainly that the machine was not licensed, nor had he secured a license. When informed that he was liable to be arrested for not having a license Mr. Banker dared the officer to arrest him, and, after some talk on the part of the patrolman, Banker dared him again to arrest him. Seeing that the argument was waxing too warm, the policeman told Banker to drive along about his business.

### The Tale of a Thief Chase.

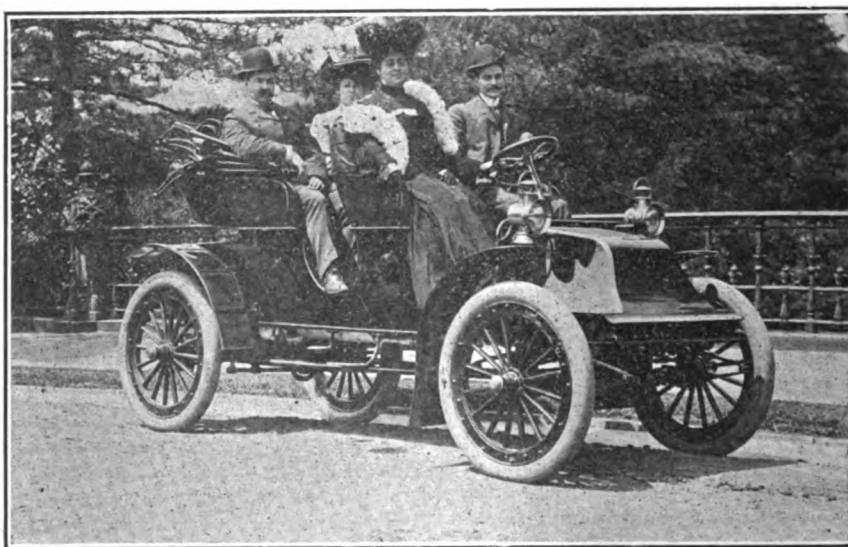
A street duel and a race in which an automobile participated enter into the story of an encounter with supposed burglars in Milwaukee on July 21. Patrolman Arthur

Burns was walking along his beat, in a residential section on the west side, where burglaries have been frequent of late, when he saw a man lying in front of one of the houses. The fellow got up and walked off as the policeman approached, but Burns followed and attempted to arrest him, when the fellow drew a revolver and opened fire. Burns followed suit, both firing until the supposed burglar jumped into a delivery wagon and made off. A supposed pal, who had also appeared on the scene, jumped into a buggy standing in front of the same house, and followed the wagon. Meanwhile Patrolmen Robert Burns and Andover came up, and the first named jumped into an automobile standing by and gave chase. The suspects escaped, however, and the only known sequel to the affair is that the horse attached to the buggy was led into the owner's stable the same evening, dying from a bullet wound. The only explanation of the escape which appears plausible is that the automobile impressed into police service by the policeman with the poetical name must be one that was built to conform to the six-miles-an-hour speed limit—or that the policeman did not want to violate the ordinance.

### His First Ride Since 1838.

In a recent run of the Rhode Island Automobile Club James L. Amsden was a participant as a guest of one of the members. It was his first automobile ride in nearly sixty-five years and the second he had ever taken, and he drew some interesting comparisons between the two.

As far back as 1838 Mr. Amsden rode in a steam carriage built by John Gore, of Brattleboro, Vt. This carriage was built on the simple plan that is used now by many makers, and it was driven by power furnished by two vertical boilers of the cylinder type, and the power was transferred to the wheels by a sprocket and chain. According to Mr. Amsden, the wheels were made very much like those on modern automobiles, only they were much larger. The rear wheels were about five feet in diameter and the



MR. TRAVIS AND PARTY IN A HAYNES-APPERSON IN CENTRAL PARK.

front wheels three feet, and the machine was capable of making fifteen miles an hour over the Vermont roads.

Mr. Amsden, who was born in 1829, enjoyed a ride in this premature production of Yankee ingenuity when Mr. Gore was using it, and he states that there were a number of difficulties in the way of running it. Tubular boilers had not been invented at that time, and the cylinder boilers which Mr. Gore had to use were not powerful enough. Moreover, the steam was generated by burning wood under the boilers, and at intervals which were altogether too frequent it was necessary to get more wood. Coal had not come into use then, and such a thing as a gas engine had not been thought of.

### Faster Than Schwab's Trip.

Charles M. Schwab no longer holds the record for the automobile run from Philadelphia to Atlantic City. George L. Low, of Bloomsburg, Penn., accompanied by H. D. Wolcote, made the trip on July 20 in Mr. Low's car, covering the distance in 2 hours and 10 minutes. Better time would have been made but for the bad condition of the roads near Atlantic City.

## LEASES A CLUB HOUSE

### Pittsburg Organization Secures Desirable Quarters and will Add Another Story.

Pittsburg automobilists are promised a clubhouse which will be as elegant and convenient as any in America. The Pittsburg Automobile Club has a committee on permanent clubhouse, consisting of W. L. Smith, W. L. Elkins, George Hallman and Reuben Miller, jr., who have succeeded in negotiations for a building at Baum and Bailey streets, formerly occupied by the Seely Mfg. Co. They have secured a ten years' lease of the premises, with very favorable conditions. The owners have agreed to complete the present building, which is only one story high, to a second story, and the club expects to spend \$10,000 on further improvements. The first story will be used for automobiles belonging to members, and the second for clubrooms proper. There will also be a large meeting room, and toilet facilities will be among the many conveniences as shown in the plans already prepared. A comfortable feature in the new arrangements will be a shower bath.

The lease the club has on the proposed premises commences on April 1, next year, but negotiations are pending whereby the club can gain immediate possession of the property. It is located among the three largest repositories of automobilists, and has streets running on three of its sides. The improvements will take about ninety days to complete.

The Pittsburg Automobile Club, which was chartered in May last, has now 170 members, and has an average increase of thirty per month. The officers are George H. Flinn, president; J. F. Burke, W. C. Temple, and D. H. Hostetter, vice-presidents; W. L. Smith, secretary; Reuben Miller, jr., treasurer; R. Pitcairn, jr., J. P. Eaton and W. R. R. Hilliard, membership committee, and H. P. Maxim, consulting engineer.

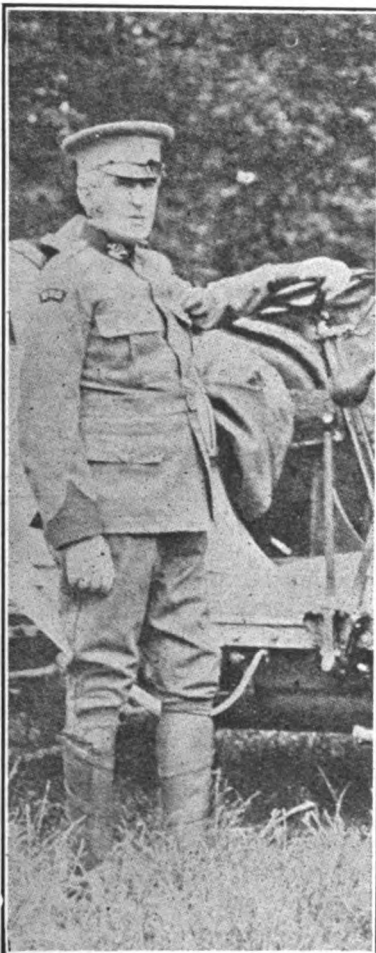
### Where Garages Flourish.

No better evidence of the great growth in popularity of the automobile within the last year can be found than in the large number of garages that have been established this summer on the Jersey coast. In making the trip by rail from Sandy Hook to Point Pleasant one sees these garages at every town along the line. The number of motor vehicles on the ocean driveway is in keeping with the increase in the number of storage stations for their accommodation. Automobile parades are in contemplation both at Long Branch and Asbury Park.

It is said that Pittsburg physicians have adopted the automobile in their practice to a greater extent than those of any other city. Nearly three-fifths of them have substituted the motor vehicle for the horse drawn one, and have nothing but praise for the former.

## One Stanton and his Uniform.

This picture is of twofold interest. It shows the uniform of the British Motor Volunteer Corps as finally approved by the War Office, and also preserves the "mug" of an expatriated American, one Oliver Stanton, who renounced his country that he might wear the uniform, or, as the English papers express it, "who took out papers of natural-



ization, so that he could serve the King as his majesty's motor expert."

The uniform consists of tunic and knickerbocker breeches of field service color serge, with dark green collar and cuffs, and red piping down the seams of the breeches and round the cuffs of the tunic. The cap is of the staff pattern and of the same color as the tunic. The badge of the corps consists of a road wheel intersected by an arrow, with the motto "Surbito" underneath. The buttons are white metal, and bear the impress of a crown, with M. V. C. over it and the motto underneath.

### Too Much Tooting.

A novel complaint has been made by frequenters of Roger Williams Park, at Providence, R. I. Autoists, they say, have made it a practice to toot their horns during the band concerts as a sort of accompaniment to the music.

The matter has been called to the attention of the Park Commissioners, and they have promptly instructed Superintendent Pitts to see that the annoyance is abated.

## BULLY FOR BEERY!

### Akron's City Solicitor Declares That License Law Will not Hold Water.

City Solicitor Beery of Akron, Ohio, has given to the automobilists of that city a weapon wherewith to fight the ordinance under which a license fee is required for motor vehicles. That official has announced that an ordinance to tax vehicles of all kinds will not hold water, and now the owners of automobiles are asking whether or not a tax can fairly be imposed upon their vehicles. When the ordinance affecting them was passed it was called a police regulation. While the automobilists do not object to the speed limit which it imposes, they claim in regard to the license fee that, as they are taxed in the general assessment for the machines in their possession, the city has no right to require them to pay another dollar to get a permit. They believe it is class legislation to tax one sort of vehicle and permit another sort to go free, and it is possible that they may fight the enforcement of the ordinance. The feeling, as voiced by one of the aggrieved owners, expresses itself in saying: "I see no reason whatever for making an automobile carry lights, bells, etc., and be numbered and tagged and pay a double tax, when the man owning a horse and buggy doesn't have to use lights or pay for the privilege of using the streets. Horses and buggies wear out the streets a great deal more than automobiles, and their owners should pay something for repairs. Anyway, we propose to see if this ordinance is not class legislation. If it is, we will carry a case to the Supreme Court, if necessary, to knock it out."

### Milwaukee Wants Horns not Bells.

Horns appear to have the best of bells, as the long controversy in Milwaukee, Wis., is at an end. An entirely new ordinance has been drafted by the Milwaukee Automobile Club for submission to Councils. The horn, it provides, is to be the only warning signal. No motor vehicle shall be run to endanger life or property or convenience. The speed shall be fifteen miles an hour in ordinary highways and seven miles an hour around bends or in crowded streets. This is a change from eight and four miles, respectively.

While passing horses, if the chauffeur notices the horse become excited, he shall slacken his pace and use all other care possible. In approaching any one, care shall be used.

Initials of the owner, not numbers, shall be placed in conspicuous places on the rear of the machines, in letters not less than three inches high. Dealers are exempt from this.

A purse of \$500 for an automobile race will be offered in connection with the next fair to be held in Butler County, Ohio.



## WANTS LARGER WHEELS

### Western Paper Undertakes to Say What Motor Cars Require for Western Roads.

Echoes of the footfalls of Progress as she goes marching across the prairies are sounded back by the Implement News, of Chicago, thus:

"Dealers throughout this Western country are successfully handling gasoline engines, and many are trying or beginning to introduce automobile road carriages. The demand for gasoline engines is mostly from farmers and for small machines—1½ and 2 horsepowers—which are used mainly for pumping water when the windmill fails to furnish a sufficient supply on account of light wind or other cause; for cutting fodder, shelling corn, churning and other light work. Occasionally a large farmer buys an 8 or 10 horsepower engine for driving his husker and shredder and power sheller, for grinding feed, sawing wood, etc. And in the towns there is a considerable demand for gasoline engines for operating printing presses and other light machinery.

"Generally these engines give good satisfaction to farmers, but occasionally one fails to satisfy either because the farmer or his man does not know or cannot learn how to properly operate it or because the engine has not sufficient capacity for the work to which it is applied. Most of the failures can be attributed to the latter cause. A gasoline engine does not develop any more power than that at which it is rated, while the power of a steam engine may be forced considerably higher than its rating, so that it may maintain the necessary speed while doing heavier work. For instance, the work of an 8 horsepower engine, though generally requiring that much power and a certain speed, may occasionally need a little more, which an 8 horsepower steam engine can be forced to furnish but an 8 horsepower gasoline engine cannot, and the purchaser of the latter might be quite dissatisfied though it was working fully up to its rated capacity. In towns where the work is more specific and regular and experts are at hand there is little or no trouble with these engines.

"In the country towns quite a number of automobile carriages or runabouts have been sold by dealers. The purchasers are doctors, liverymen and persons seeking something new in pleasure riding. Farmers do not buy them because they are yet too expensive and not satisfactory on country roads. They run nicely and ride easily on the smooth streets of cities and towns, but they cannot be depended upon for regular use in the country, where the roads are generally too rough for safety and easy riding. Being of greater weight and more compact

than the ordinary carriage, and having wheels smaller in circumference, they strike heavily against obstructions and drop into holes or irregularities of surface which a carriage, having larger wheels and greater elasticity passes over or spans with little or no jar, consequently they are more liable to damage and ride less easy. For country roads automobiles should have larger wheels and be more elastic.

"And, speaking of country roads, it may be said of them that generally in the West they are not much better than they were ten years ago."

### The Sun Spot in Syracuse.

An angry sun spot made its appearance to Syracusians recently and straightway became an object of wonder and study to automobilists there, for it was an automobling sun spot and was recognized as portentous. It is visible only at intervals; and never when the sun shines. Usually it is clouded over by a straw chapeau owned and worn by C. Arthur Benjamin, of Franklin fame.

The sun spot referred to is located on the crown of the stately head of Benjamin, and it has had various significant changes. A vivid crimson disc it was a week ago, showing right on a spot where the hair ought to be but is not; later it began to show a roughened countenance as pieces of the cuticle began to peel.

The portent of this sun spot on the Benjamin crown has not been generally understood in Syracuse, but its origin and meaning are known in New York City. It is the result of an attempt to import New York fashions to Syracuse. While on a recent visit to the metropolis, during the hot spell, the enterprising Benjamin noticed a great many persons driving automobiles bareheaded. He thought at once that he had discovered a new air-cooled fashion for the motoring head, and resolved to introduce it higher up in the State. He forgot where the brand of Father Time had left a circle of nakedness on the crown of his pate, and recklessly bared his head to the breezes and to the rays of Old Sol, with the result of acquiring the lurid sun spot that startled the natives till he returned to the good old style of keeping it covered. Incidentally, bareheaded automobiling is not a swell fashion of New York, but only a sporadic touch of negligence that marks the heated term.

### To One Fright, \$30.

A judicial decision which is amusing in some respects has just been confirmed by one of the higher courts in France. A gentleman named Raillier, while on the sidewalk of the Boulevard de Belleville, Paris, was scared half out of his wits by an automobile, which suddenly mounted the curb near him. Although the vehicle did not touch him he was so prostrated by fright that he took to his bed for a week, and then sued for damages. A court of justice awarded him the sum of 150 francs, or \$30, and on an appeal to a higher court the judgment was confirmed.

## BOSTON Y. M. C. A. COURSE

### The Three Lines of Work Finally Outlined—Designed to Interest all Classes.

Arrangements are nearly completed for the course of lectures on the automobile to be given next winter under the auspices of the evening institute connected with the Boston Young Men's Christian Association. The lectures will relate to the construction, care, handling and repairing of all types of steam, electric and gasoline carriages. The advisory committee, consisting of Colonel J. F. Soutter, president of the New England Automobile Club; Isaac H. Davis, George H. Lowe, A. H. Neale and Dr. Walter G. Chase, chairman of the association educational committee, has taken this matter under its charge, and has formulated plans for three very complete lines of work, as follows:

Course A—Intended for the owners, operators and prospective purchasers of automobiles, giving information concerning the important points of steam, electric and gasoline carriages.

Course B—A complete draughting course, dealing with the construction of a typical gasoline carriage, intended to prepare machinists and draughtsmen for the automobile trade.

Course C—A practical course of steam, electrical and gas engineering, fully illustrated with engines, boilers and other equipment for the training of professional chauffeurs.

All these courses will be under the instruction of experienced men, and the lecturers in Course A will include some of the most prominent mechanical engineers and automobile experts in the country. So many applications have already been made for admission to Courses B and C that it is expected the lists will have to be closed early in order to avoid the overcrowding of classrooms.

### One Car Replaces Ten Horses.

An automobile stage line is to be established between Santa Maria and Guadalupe, in Santa Barbara County, California, Frank E. Hartigan, manager of the Pacific Coast branch of the Mobile Company of America, having recently investigated the route with satisfactory results. The service will be maintained with one Mobile wagonette. The road is level and in excellent condition, so that good speed can be made. A round trip was made as a test. The ten miles from Santa Maria to Guadalupe in the wagonette, carrying twelve men weighing 2,160 pounds, was accomplished against the wind in 28 minutes. The return trip to Santa Maria with the wind occupied 25 minutes. The service is certain to give satisfaction to all concerned, for the road being level and good, the machine will wear well and will need little repairing. The business is regular, and has hitherto required ten horses and three drivers to accomplish it.



## ROUTES NEAR NEW YORK

### Easy Rides Recommended and Taken by a Man and his Wife in a Steam Car.

Having travelled upward of three thousand miles in different parts of New-Jersey in his steam automobile, A. Phelps, of Newark, speaks as one possessed of knowledge when he lays out for others pleasant routes of travel. Mr. Phelps has always been accompanied by Mrs. Phelps on his tours, and he describes some of them as follows:

"Among the pleasant trips we have taken recently was one from Newark to Asbury Park, going down in the forenoon and returning the next afternoon. The route we took was to Elizabeth, following Broad street to the Rahway road, thence to Rahway, Metuchen, New Brunswick, Old Bridge, Matawan, Keyport, Middletown, Red Bank, Eatontown, North Long Branch, Long Branch to Asbury Park. The roads are all good excepting that from Matawan to Keyport. This is very sandy, the wheels of our automobile sinking six inches deep in some places, requiring 250 pounds of steam to drive the machine through it. I have been told since our trip that there is a much better road leading from Matawan to Keyport.

"The distance from Newark to Bradley Beach, Asbury Park, according to the cyclometer on our car, is sixty-nine miles, and it registered sixty-eight and one-half miles from Zachariah's automobile station, No. 602 Main street, Asbury Park, to Newark, making a total distance travelled 137½ miles. The actual time consumed in running this distance was 8 hours and 25 minutes by the clock on the dashboard. The trip was an exceedingly pleasant one.

"Another interesting trip to take is from Newark to Greenwood Lake. The roads are all that could be asked for, and one encounters some beautiful scenery. The road from Newark leads through Bloomfield and Montclair, where it turns sharply to the right just beyond the Mountain House. A short ride on this road brings you in to Pompton turnpike, which passes through Cedar Grove and Singac to Pompton. From Pompton to Bloomingdale a fine stone road follows the river through Butler, Smith's Mills and Charlotteburg to Newfoundland. This road from Bloomingdale is called the Hamburg turnpike. The distance from Newark to Newfoundland by this route is thirty-four miles to Brown's Inn. Some of the hills by this route are quite steep.

"The distance from Newfoundland to Greenwood Lake is nine miles, and, while this stretch of road is not as good as the Hamburg turnpike, yet it may be called a very fair road. There is also a pretty good road leading to the head of the lake.

"When my wife and I made this trip we left Newark at 10:45 o'clock in the forenoon, arriving at Newfoundland at 12:45 o'clock.

We had dinner at Brown's Inn, and, after filling the water tank of the automobile at 1:30 o'clock, we started for the lake, arriving at 2:05, making the run in thirty-five minutes. Immediately after leaving Newfoundland we struck a fierce hill on the road leading to the lake. The grade is said to be over 20 per cent on some portions of it; besides, it contains a lot of small stones, put there, I presume, to prevent the water from washing the bed of the road. I am afraid some of our friends owning gasoline machines who would attempt to climb this hill would need a little back power in addition to using their slow speed gears.

"We made this run to the lake and returned home at 6:45 p. m., without a hitch of any kind. The distance travelled was ninety-six and five-eighths miles, which included a trip partly around the lake, the actual running time being six and three-quarters hours. The gasoline consumed for the entire trip was seven and one-quarter gallons; water consumed, about eighty-eight gallons. While I don't think it is possible for gasoline automobiles to make as fast time on this route as the steam automobiles, owing to the heavy grades, yet I think none of the grades, excepting possibly the one near Newfoundland, would be too steep for the gasoline cars to overcome, and I think this hill can be avoided by taking another road a short distance above Brown's Hotel."

### Explored the Yosemite.

Major J. Fulmer, of Los Angeles, Cal., has made a success of engineering an automobile into the Yosemite Valley. Others have failed in attempts to negotiate the difficult mountain grades and sharply tortuous passes marking the route. Major Fulmer, after a careful study of the roads and conditions, started on his trip on June 29, accompanied by Mrs. Fulmer, Miss A. L. Wade and A. C. Stewart, of the Union Oil Company. From Los Angeles they went over the Wawona route without experiencing a single mishap or having to make repairs of any kind on the way. Speaking of the trip Major Fulmer said:

"The trip was a success from start to finish. I used a machine equipped with a 6½ horsepower gasoline engine and with adjustable gearing for mountain climbing. The worst part of the trip was over the desert from Antelope to Tejon and along the hot sands of the Bakersfield plains. Some places on the desert the sun was so hot that the insulation around the spark coils began to melt, and we had to run water over it to cool it. About our steepest grade was encountered near Newhall, and that was the only place where we were forced to get out and walk. We rode through the difficult Tehachapi Mountains without mishap. From Los Angeles to Raymond we used only \$5 worth of gasoline. From Fresno to the valley we were exceedingly lucky. We had the honor of being the first to ride through the big Sequoias near Wawona, and climbed the big grades at Chinquapin without any great difficulty."

## SPRINGFIELD WAKES UP

### Local Club Shakes Itself and Makes Plans for Pleasure and Talks Fights.

Automobilists in Springfield, Mass., are shaking off a semi-lethargic feeling which appeared to have crept over the local automobile club, and that organization, which has about one hundred members, has begun to think of doing something. New quarters are to be arranged at the corner of Worthington and Dwight streets, with a large meeting room and parlor, and quite large storage capacity. A committee has been appointed to consider a matter of providing country quarters, and it is probable that a place in the vicinity of Nine Mile Pond will be selected.

The matter of holding an automobile race meet is under discussion, and if arrangements can be made with Manager Shea of Hampden Park, such a meet will probably take place in the near future. Barney Oldfield, Tom Cooper and other racing motorists have been heard from in connection with the matter. There would be class and special challenge races, which, it is thought, would attract popular attention.

Another enterprise for quickening the interest of members is a clambake, which will be held in a couple of weeks at some point easily reached by the automobiles, and it is estimated that there will be an attendance of at least three hundred.

It is probable that the club will act with other Massachusetts clubs in a combined effort to secure the repeal of the present law, which in some particulars is obnoxious to automobilists. At present automobiles are not allowed on some of the most desirable roads, like the "Crest," running along the north shore from Boston, in many parks and on certain roads in cities. This will have to be changed say the automobilists. Owners are taxed, registered and licensed, and are responsible persons. That a few people will insist on unlawful speed is no reason why the majority should suffer, particularly as the registration of members makes it easy to detect the offenders. It is also contended that every vehicle should carry lights after sunset. This is the case in Connecticut. The sentiment of the club is in the strict compliance with the law while it exists, and the members will try to remove what they call the prejudice of horse owners.

### Touring the Northwest.

The long distance automobile tour is popular this season. Among parties on the road at the present time are Volney S. Beardsley and wife, of Shelby, Ohio, who left home on July 7, and propose to cover three thousand miles of country before they return. During the first four days they travelled through Ohio and Indiana to Chicago, a distance of four hundred miles. Thence they rode to Milwaukee. Their tour will cover Minnesota, Dakota, Nebraska and other States, and among the places they intend to visit are Omaha, Kansas City and St. Louis.

# **NOTICE**

**To Manufacturers, Dealers, Importers,  
Agents and Users of**

# **GASOLINE AUTOMOBILES**

United States Letters Patent No. 549,160, granted to George B. Selden, Nov. 5, 1895, controls broadly all gasoline automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following-named importers and manufacturers:

Electric Vehicle Co.  
Winton Motor Carriage Co.  
Packard Motor Car Co.  
Olds Motor Works.  
Knox Automobile Co.  
The Haynes-Apperson Co.  
The Autocar Co.  
The George N. Pierce Co.  
Apperson Bros. Automobile Co.  
Searchmont Automobile Co.  
Locomobile Co. of America.  
The Peerless Motor Car Co.  
U. S. Long Distance Automobile Co.

Pope Motor Car Co.  
J. Stevens Arms & Tool Co.  
H. H. Franklin Mfg. Co.  
Charron, Girardot & Voight Co. of America  
(Smith & Mabley).  
The Commercial Motor Co.  
Berg Automobile Co.  
Cadillac Automobile Co.  
Northern Mfg. Co.  
Pope-Robinson Co.  
The Kirk Mfg. Co.  
Elmore Mfg. Co.  
E. R. Thomas Motor Co.

**Waltham Manufacturing Co.**

These manufacturers are pioneers in this industry and have commercialized the gasoline vehicle by many years of development and at a great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacturers. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasoline automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturers or importers will be liable to prosecution for infringement.

## **ASSOCIATION OF LICENSED AUTOMOBILE MANUFACTURERS**

**7 East 42nd Street, New York.**

## TOURISTS DOT THE LAND

### Journeys That Indicate the Great Growth of the Pleasure Side of Automobiling.

As a vehicle adapted to all the requirements of pleasure touring the automobile has been given a thorough and satisfactory test by Mr. and Mrs. David L. Atkin, of Pittsburg, Pa., who arrived at Lake Hopatcong on July 22, having been on the road with their automobile since early in June. They were accompanied by Mr. and Mrs. D. Hastings and James D. Bowden, of Pittsburg.

After leaving Pittsburg the party journeyed to Detroit, Mich, whence they crossed over into Canada and proceeded in a leisurely way along the northern shore of Lake Ontario. A visit to the Thousand Islands was a pleasant feature of the trip. Passing through the many quaint villages which lie along the St. Lawrence River, the party next visited Montreal, where several days were devoted to sightseeing. Afterward they recrossed the Canadian line and followed the west shore of Lake Champlain. During the rest of the tour visits were made to Saratoga, Albany and New York City.

All the members of the party expressed satisfaction with the trip in discussing it with friends at Lake Hopatcong. They described it as a delightful journey, and said they had met with no mishaps worth mentioning.

Worcester, Mass., is a favorite over-night stopping place for tourists bound for or returning from Boston. One night last week two notable parties put up there. The first was from Pittsburg, Pa., and included James Laughlin and H. Hughart Laughlin, of that city, and P. Stanlel Adamson, of London, England. The party was travelling from Pittsburg to Boston in a 10-horsepower White steam touring car. The trip from Dalton, Mass., to Worcester had been made the day before, the party stopping at the Franklin that night, and going on to Boston the second morning following.

The second party consisted of J. E. Coleman, Master Loring Coleman and J. E. Coleman, jr., of Chicago. The run from Chicago to Worcester had been made in less than two weeks' time. The party travelled in a big canopy 20-horsepower Winton touring car. The travellers were on the way to Newport.

An automobile tour of the New England States, occupying about two months, was made this summer by H. W. Whipple, of East Orange, N. J., who reached home early last week. Mr. Whipple, who is the treasurer of the American Automobile Association, was accompanied by his family on this trip, and visited many points of interest. After his return he devoted two days to rest, and then left for Baltimore, which is to be

his headquarters for a season of touring in that part of the country.

Four years ago George F. Chamberlin, formerly chairman of the law committee of the Automobile Club of America, made a trip across New-England and down the Hudson River in horse drawn vehicles. He is now traversing the same route in a White steam touring car. The party consists of Mr. Chamberlin, his mother, Mrs. Albert Chamberlin, his brother, A. Ward Chamberlin, and Miss Emily Silkman.

They left Boston for Portland, Me., last week, and from there will strike off through the region of the mountains, then down the Connecticut Valley for some distance, and then across Vermont to Lake Champlain. From that point the trip will be down the banks of the Hudson.

Three York (Pa.) business men, Messrs. Samuel Small, jr., William Billmeyer and John Williams, left that town last week in Mr. Small's automobile on the longest trip ever undertaken by York automobilists. The itinerary will be as follows: York to Atlantic City; from Atlantic City along the New Jersey coast to New York; thence they traverse Long Island; from there they return in a roundabout way to York. The trip will cover about ten days and upward of one thousand miles in distance.

H. E. Rodgers last week drove a Peerless touring car from Brookline, Mass., to Portland, thence to Winter Harbor, Me., without any accident or repairs save a slight puncture of one of the tires. He says that the sand through which he passed was at times over the tires in depth, and the hills more than 20 per cent grade, yet the Peerless made these with the second speed, although the load was heavy—three passengers and heavy baggage.

C. H. Russell, a travelling salesman for the Alden Speare's Sons Co., of Boston, does all his travelling through New England and New York in his automobile, a 10 horsepower Winton car. He is the first travelling salesman from Boston to adopt this means of travelling. He has driven over 700 miles on his business trips by automobile this season.

R. C. Crawford, of Chicago, started from that city last week in a Winton car, and will proceed by easy stages to Detroit, Rochester, Albany and New York.

The Association Generale Automobile has decided to paint its signposts a distinctive color for each individual route from Paris. For instance, the posts between Paris and Bordeaux will be blue, and those from Paris to Lyons will be red, and so on.

When J. F. Montgomery received his Locomobile a week or two ago the automobile population of Victoria, Tex., was just doubled—it now numbers two.

## OBEYS THE BAILEY LAW

### Southampton Passes an Eight-Mile Resolution and Erects the Necessary Signs.

The Southampton (Long Island) village trustees have passed an ordinance regulating the speed of automobiles within the village, and have placed signposts on all the highways at the village limits to notify automobilists of the regulation. On each signboard are the words in large letters, "Slow down to eight miles," and an arrow indicates the direction in which the speed is to be reduced.

The resolution states that, "Whereas, All the highways within the village limits are built up to such an extent that the speed of automobiles and motor vehicles thereon should be reduced to eight miles an hour, it is resolved that the following be and hereby is enacted as an ordinance of the village of Southampton: The speed of automobiles and motor vehicles on the highways within the incorporated village of Southampton shall not be in excess of eight miles an hour."

Notwithstanding this action the unfriendly feeling toward automobilists, so prevalent in Southampton hitherto, is rapidly abating. Automobiles are becoming so numerous that the horses are getting accustomed to them, and there are fewer accidents from frightened horses than last season. The automobilists for the most part are as considerate as possible, and give every chance for the drivers of horses to keep them under control when fright is shown. On the business streets most of the motor vehicles go at a moderate rate, but on the residence streets, especially on Hill street and Hampton Road, it is said to be no uncommon thing to see them going at a high rate of speed.

### New Haven Sets Traps.

Chief of Police Wrinn of New Haven, Conn., has begun a campaign against speeding autoists, who, it is asserted, have been habitually violating the State law, which calls for a maximum of twelve miles an hour.

The police have been receiving many complaints of late from residents of Orange street, West Chapel street, Whitney avenue and Whalley avenue about the manner in which automobiles are raced over these thoroughfares, endangering the lives of pedestrians and children.

At the request of Chief of Police Wrinn the city engineers have measured off quarter-mile stretches on the streets above named, and plain clothes men will be detailed on the various stretches with stop watches. Every auto going at what appears to be excessive speed will be timed for the stretch and the number of the machine taken. If on comparing watches the policemen decide that the speed limit has been violated they will hunt up the owner of the vehicle having the number, and he will be brought into court and arraigned.

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## The Week's Patents.

733,949. Battery. Daniel Drawbaugh, Eberlys Mill, Pa. Filed April 12, 1902. Serial No. 102,527. (No model.)

Claim.—A dry battery comprising an outer surrounding electrode, a central opposite electrode surrounded thereby, a composition of carbon, plumbago, and a plastic material surrounding the central electrode, and an alkali composition incased by the first mentioned electrode and surrounding central electrode and the first mentioned composition.

734,029. Pump Mechanism for Steam Carriages. Rollin H. White, Cleveland, Ohio, assignor to the White Sewing Machine Company, Cleveland, Ohio, a corporation of Ohio. Filed Jan. 17, 1903. Serial No. 139,392. (No model.)

Claim.—In a steam carriage, the combination of a rigidly supported frame having top and bottom members, two upright side members and a back plate connecting said side members by means of which the frame is secured to a suitable support, and two pump cylinders respectively secured to said top and bottom parts in axial alignment, with a single piston rod connected with both pump pistons, the engine, and mechanism operatively connected with said rod and with the engine shaft, substantially as specified.

734,084. Automotor Carriage. Claude J. Ollagnier, Paris, France. Filed Nov. 10, 1902. Serial No. 130,789. (No model.)

Claim.—In combination in a motor road vehicle the front wheels, each of which is independently pivoted to be adjusted about a vertical axis, a divided flexible shaft, a differential gear for driving the said divided

shaft, driving means between the divided shaft and the hubs of the front wheels and extending vertically at each end of the divided shaft, the said divided shaft being supported over the axles of the front wheels to be adjusted therewith and means for adjusting the front wheels, substantially as described.

734,138. Electric Igniter for Explosive Engines. Andrew L. Riker, New York, N. Y., assignor, by mesne assignments, to Electric Vehicle Company, Jersey City, N. J., and Hartford, Conn., a corporation of New Jersey. Filed Jan. 8, 1900. Serial No. 759. (No model.)

Claim.—In combination with an igniter for explosive engines, an electric circuit, an interrupter comprising a fixed terminal, a freely vibrating spring arm carrying the movable terminal, a cam rotated in unison with the engine, said cam located in the line of prolongation of said spring arm when in its normal position and having similar opposed faces whereby said spring arm will be plucked out of its normal position by a rotation of said cam in either direction, said fixed contact and spring arm being mounted on a member angularly adjustable around the cam centre, all substantially as and for the purpose described.

734,156. Time, Speed and Distance Recorder. Richard F. G. Baxandall, Ben Rhyding, England. Filed April 5, 1902. Serial No. 101,569. (No model.)

Claim.—In a device of the character described the combination with a moving band, of a plurality of pencils bearing thereon and adapted to mark longitudinal parallel lines on the band, and means for simultaneously moving all said pencils transversely of the

band to mark transverse lines intersecting the longitudinal lines, substantially as described.

734,197. Induction Coll. Charles F. Spiltdorf, New York, N. Y. Filed May 19, 1903. Serial No. 157,829. (No model.)

Claim.—In an induction coll, a plurality of separated secondary windings located about the primary insulation, and separate completely inclosing means of insulation for said windings.

734,202. Steering Device for Motor Vehicles. Fremont J. Tromble, Bay City, Mich., assignor of one-half to Harrison W. Garland, Bay City, Mich. Filed May 7, 1903. Serial No. 156,066. (No model.)

Claim.—In a device of the class described the combination with the longitudinally movable steering link of a motor vehicle; a fixed slotted arm carried by the front axle; a collar on said link arranged to register with the fixed arm when the steering link is in straight-ahead position; and adapted to pass transversely through the slot of said arm when the link moves lengthwise; a slidable washer each side of said collar and a pair of springs carried by said link, each spring having its outer end secured to the link and longitudinally adjustable thereon; its inner end being movable thereon and normally pressing against said collar.

734,209. Transmission Gearing for Automobiles. Edgar Whitercraft, Brighton, N. Y., assignor of one-half to Elfred C. Baldwin, Derby, Conn. Filed Oct. 21, 1902. Serial No. 128,162. (No model.)

Claim.—In transmission gearing for automobiles, the combination with a driven shaft, of a low speed friction clutch cone, a back-



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ward motion friction clutch cone, a high speed friction clutch cone and a medium speed friction clutch cone, all loosely mounted upon the said shaft and all constantly driven in the same direction with the exception of the backward motion cone, which rotates in the opposite direction from the others, friction clutch cups coacting with the respective friction cones, all of the said cups rotating with the said driven shaft, and manual means for independently operating any one of the said friction cups, whereby the shaft is rotated at the speed of the cone brought into play by the engagement with it of its coacting cup, the said backward motion cone and high speed cone being positively driven, and in turn driving the low speed cone and the medium speed cone.

734,220. Combination Internal Combustion and Compressed or Liquid Gas or Compressed or Liquid Air Engine. Frank Bryan, London, and Abel H. Bayley, Niton, Isle of Wight, England. Filed Feb. 26, 1901. Serial No. 48,973. (No model.)

Claim.—In a liquid air or gas engine, the combination with the supply reservoir and converter, of a movable measuring chamber having ports adapted to alternately communicate with said reservoir and converter and automatically deliver the measured charge to the converter in direct opposition to the pressure in the converter when the pressure in the same is below the required working pressure.

734,254. Wheel. Richard S. Bryant, Columbus, Ohio. Filed March 31, 1903. Serial No. 150,390. (No model.)

Claim.—A wheel composed of opposite half sections, each section being formed of sheet metal and provided with semi-tubular spokes and a semi-tubular rim portion, the spoke members of one section being united to the spoke members of the other section, and a band lying within the rim portion and snugly embracing the outer ends of the spokes.

734,291. Electric Battery Switch. Joseph Appleton, Philadelphia, Pa., assignor to the Electric Storage Battery Company, Philadelphia, Pa., a corporation of New Jersey. Filed July 6, 1900. Serial No. 22,750. (No model.)

Claim.—In an end cell switch and in combination with the main brush and its contacts, an auxiliary carbon brush which constitutes a path of high resistance by which adjoining cells are connected through the varying resistance of the carbon brush as the main brush passes from contact to contact.

734,296. Tire. Charles Burger, Chene-

Bougeries, near Geneva, Switzerland. Filed Dec. 15, 1902. Serial No. 135,173. (No model.)

Claim.—A pneumatic tire, comprising an outer coating or casing of rubber, or rubber and fabric, and a plurality of shells of spring metal incorporated in said rubber, overlapping but not touching each other, substantially as set forth.

734,356. Cooling Device for Explosive Engines. Martin Offenbacher, Furth, Germany, assignor to the firm of Vereinigte Maschinenfabrik Augsburg und Maschinenengesellschaft Nuernberg A. G., Nuremberg, Germany. Filed Dec. 30, 1902. Serial No. 137,197. (No model.)

Claim.—In combination with an engine having a water jacket, water circulating pipes therefor, a compressed air pipe connected with the circulating pipes and valves in said circulating pipes whereby water may flow into the jacket or be forced therefrom, substantially as described.

734,421. Fuel Governor for Oil Engines. Arthur Krebs, Paris, France, assignor to Societe Anonyme des Anciens Etablissements Panhard et Levassor, Paris, France. Filed Nov. 10, 1902. Serial No. 130,800. (No model.)

Claim.—A device of the class described embodying a main air supply, fuel injecting means coacting therewith, an atomizing chamber, an exhaust conduit, means actuated by the engine governor to control the passage of the explosive from the atomizing chamber to the conduit, and a supplemental air supply controlled by the suction stroke of the engine.

734,434. Pneumatic Tire. William F. Schacht, Goshen, Ind. Filed May 25, 1903. Serial No. 153,737. (No model.)

Claim.—A pneumatic tire, composed of an impervious hard previously vulcanized rubber band or strip located in the tread portion of the tire, a rubber sheet around the strip, layers of fabric, and an inner and an outer layer of rubber, all vulcanized together to unite the parts intimately, substantially as described.

The town of Leicester, Mass., has fixed a maximum speed of twelve miles per hour for automobiles. Participants in the Boston reliability run last fall will remember Leicester Hill, just outside of the town, and which proved a stumbling block for a number of the cars.

### Boston's Automobile Police.

Boston has been famous for its "notions" from time immemorial, and, as a rule, they have met with more favor than ridicule, even though the rest of the world loves to poke fun at the dear old city of culture and baked beans. Boston knows how to make good use of things, and has found an unsuspected usefulness in the automobile, which has been impressed into police service.

The ultra swell section of Boston is known as the Back Bay District, where the broad and well paved streets and avenues are lined by palatial residences. During the summer season these fine houses are closed while their owners are seeking health and recreation in cooler regions. Vandals and petty thieves have had a picnic in the district, conducting their rapacious operations with little fear of the police. The ordinary patrolman was easy to avoid, and to outrun in case of a pursuit; the mounted cop was heard afar off, or the clatter of his horse's hoofs was.

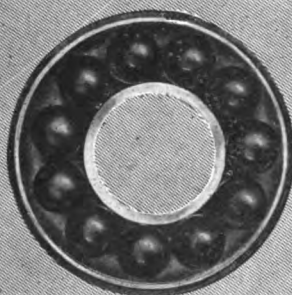
Hence the adoption of the automobile by the police department a few weeks ago, since which, as the records show, scarcely a day has passed without the arrest by the automobile "cop" of at least one offender, and that in a single day he has gathered in as many as four thieves unaided. As the summer season advances and the harvesting period of the thieves shortens, they become bolder and more active; hence the automobile officer is expected to be kept very busy during the next six weeks.

So great has been the success of this experiment that it is reported the police department intends to have an automobile squad comprising six machines before the end of July. With such a force it will be possible to patrol several of the outlying districts of the town and also to increase the auto-policemen's duties. For example, scorches of all varieties and degrees of recklessness will be taken care of, and there will be no escape for the hog who demands the whole road.

The police automobile now in use is in charge of a chauffeur and carries a policeman in civilian's attire. It goes out in the morning and covers every part of the Back Bay region at a speed of from five to seven miles an hour. In the course of a day it travels fifty or sixty miles, or nearly twice the distance covered by any member of the mounted force.

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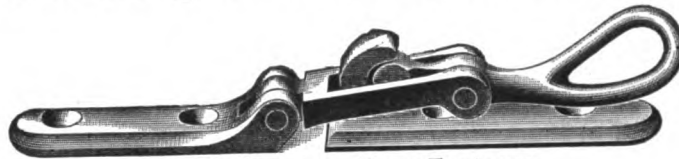
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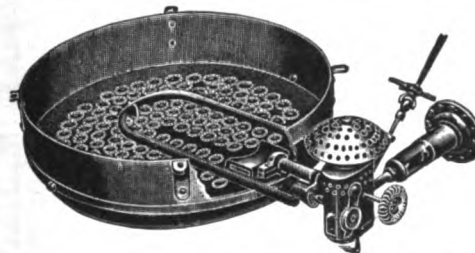
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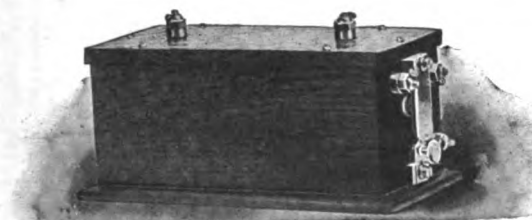


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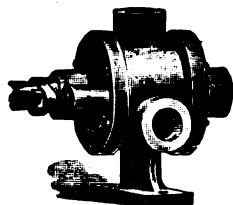
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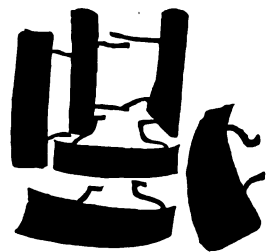
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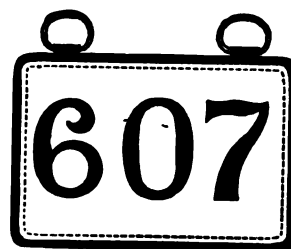
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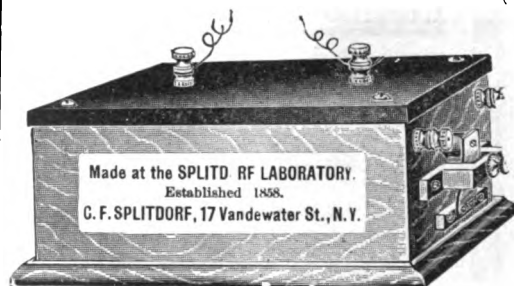
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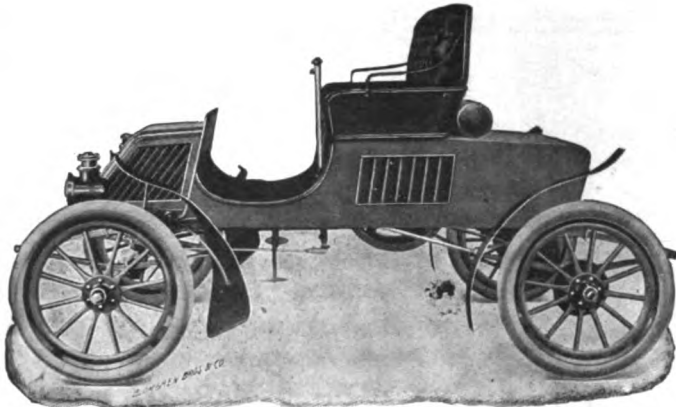
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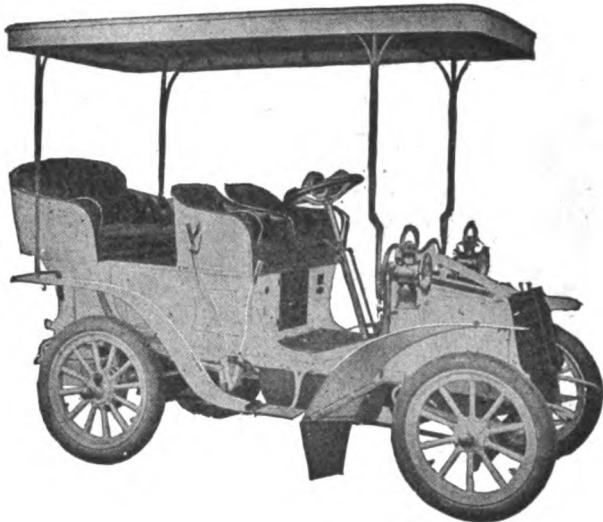
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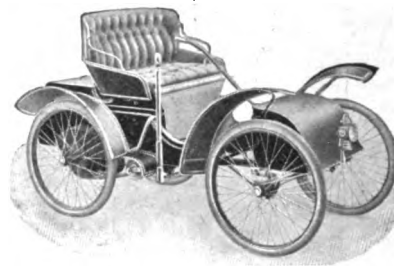
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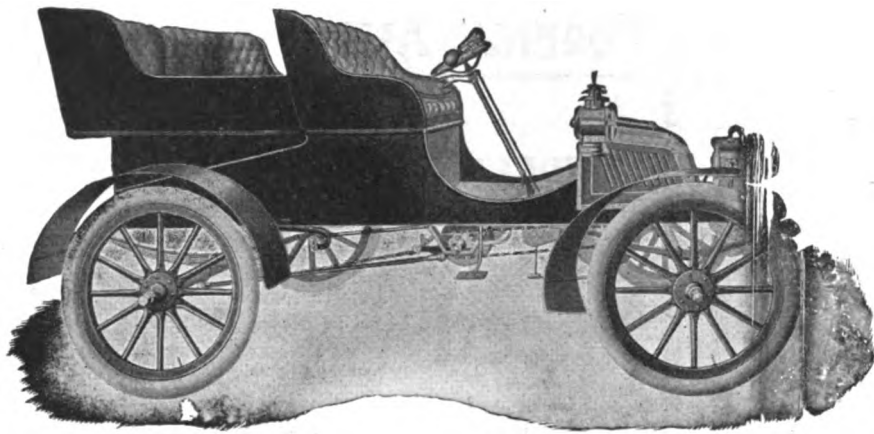
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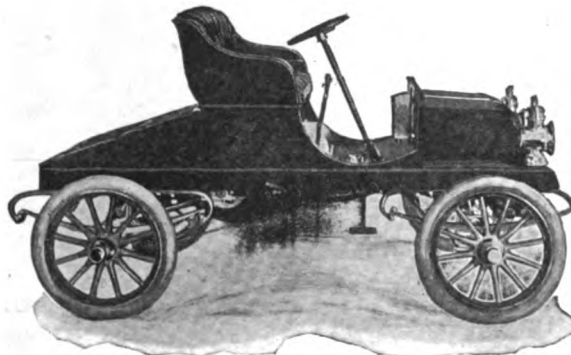
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Most men are not mechanics. The GENERAL is built without complex mechanism. The detail of its management can be mastered simply and quickly. It is impossible to lose control of the GENERAL. Considering the solidity of its performance and the thoroughness of its work it is the cheapest automobile on the market.

**GENERAL AUTOMOBILE & MFG. CO. - CLEVELAND, O.**

## STUDEBAKER ELECTRIC AUTOMOBILES.



THE  
AUTOMOBILE  
WITH A  
REPUTATION  
BEHIND  
IT.

EVERY STUDEBAKER sold has meant a satisfied customer. It makes friends and keeps them. Agents and dealers in territory we have not already covered should write for our catalog and terms. Our machines are unsurpassed for hill climbing and quiet running. They are built by a firm whose reputation is a guarantee of good work. What Studebaker stands for is known to every prospective customer for an automobile.

*Complete line can be seen at our branch houses in all principal cities.*

### STUDEBAKER BROS. MFG. COMPANY

Studebaker Bros. Co., of New York, Broadway and Seventh Avenue,  
Cor. 48th St., New York City.

Studebaker Bros. Mfg. Co. 378 to 388 Wabash Ave., Chicago, Ill.  
Factory and General Offices, South Bend, Ind.

## FOREIGN AUTOMOBILES—

built for speed on smooth roads.

## PEERLESS TOURING CARS—

built for speed and service on all roads.

### Speed

Foreign automobiles have often been defeated in track and hill-climbing contests by Peerless cars of less horse power.

PEERLESS TOURING CARS have never been defeated in a hill-climbing contest, and have never lost any contest in competition with a car of equal horse power.

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PEERLESS TOURING CARS are built strong enough to withstand strains from riding over rough roads, and their mechanism is so simple as to be easily understood by any one.

Can we send you additional information? Address Dept. B.

## The Peerless Motor Car Company

CLEVELAND, OHIO.

Member Association of Licensed Automobile Manufacturers.

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## The NEW WHITE STEAM TONNEAU for 1903



### NEXT TO FLYING

is the motion of the incomparable WHITE—smooth, noiseless and free from all motor vibrations—a swift, gliding movement that affords the maximum of automobiling pleasure, minus its every defect.

*Write for full particulars, experts' reports and official results of important endurance contests.*

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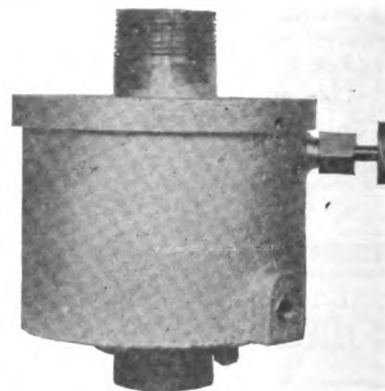
(Automobile Department)

CLEVELAND, OHIO.

22 Union Square, New York, N. Y. 509 Tremont St., Boston, Mass.  
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A notable advancement  
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Float Feed and Mixing  
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**SIMPLE.**  
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Absolutely automatic regulation of  
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EASILY APPLIED TO ANY ENGINE.

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## Clincher Automobile Tires

THE ORIGINAL  
AMERICAN  
CLINCHER

No doubtful point of construction and no saving of one good feature at the expense of another.

### A Goodrich Tire

is thoroughly practical in every detail of construction.

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**The B. F. Goodrich Company**

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# Locomobile

"THE CHOICE OF THE  
BEST CHOOSERS."



**M**OST of the visitors at our factory mention the fact that they own some good make of automobile. Then they go on to say that they have heard our car very favorably spoken of, and would like to try it. After they have been out in the car, it is "all over" with them.

Did it ever occur to you that it might be advisable for *YOU* to try one of our cars? You will find it the *Smoothest Running, Most Easily Controlled and Most Sensibly Designed* car on the market. Our factory, notably large and impressive, is convenient to New York. Let us know when you are coming, and we will have a Locomobile meet your train. We want you not only to *ride* in our car, but to see how carefully we make it.

**The Locomobile Company of America,**

General Office: BRIDGEPORT, CONN.

#### BRANCH OFFICES:

NEW YORK CITY—Broadway, corner 76th Street.

BOSTON—15 Berkeley Street.

BRIDGEPORT—Factory at Seaside Park.

PHILADELPHIA—249 North Broad Street.

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Members of the Association of  
Licensed Automobile Manufacturers.

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# Marvelous, Indeed!

Again the genuine detachable G & J Tires demonstrate they are the fastest and most reliable automobile tires in the world.

At Columbus, Ohio, July 4th, Barney Oldfield broke all existing records from one to ten miles, establishing a new table of world's records as follows :

OLDFIELD'S RECORD AT COLUMBUS, O., JULY 4, 1903.					
1st mile,	.	56 2-5	One mile,	.	.56 2-5
2nd "	.	59	Two miles,	.	1.55 2-5
3rd "	.	59 3-5	Three "	.	2.55
4th "	.	1:00	Four "	.	3.55
5th "	.	59 3-5	Five "	.	4.54 3-5
6th "	.	59 3-5	Six "	.	5.54 1-5
7th "	.	1:01	Seven "	.	6.55 1-5
8th "	.	1:00	Eight "	.	7.55 1-5
9th "	.	59 3-5	Nine "	.	8.54 4-5
10th "	.	1:00	Ten "	.	9.54 4-5
<hr/> TOTAL, . 9.54 4-5			<hr/> Mile Average, 59 4-5		

INSIST ON

## G & J TIRES

being fitted on your automobile.

They will be furnished by manufacturers and dealers everywhere.

### G & J TIRE Co.

INDIANAPOLIS, IND.

NEW YORK AGENCY, 81 Reade Street, New York City.

# **NOTICE**

**To Manufacturers, Dealers, Importers,  
Agents and Users of**

# **GASOLENE AUTOMOBILES**

United States Letters Patent No. 549,160, granted to George B. Selden, Nov. 5, 1895, controls broadly all gasolene automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following-named importers and manufacturers:

**Electric Vehicle Co.  
Winton Motor Carriage Co.  
Packard Motor Car Co.  
Olds Motor Works.  
Knox Automobile Co.  
The Haynes-Apperson Co.  
The Autocar Co.  
The George N. Pierce Co.  
Apperson Bros. Automobile Co.  
Searchmont Automobile Co.  
Locomobile Co. of America.  
The Peerless Motor Car Co.  
U. S. Long Distance Automobile Co.**

**Pope Motor Car Co.  
J. Stevens Arms & Tool Co.  
H. H. Franklin Mfg. Co.  
Charron, Girardot & Voigt Co. of America  
(Smith & Mabley).  
The Commercial Motor Co.  
Berg Automobile Co.  
Cadillac Automobile Co.  
Northern Mfg. Co.  
Pope-Robinson Co.  
The Kirk Mfg. Co.  
Elmore Mfg. Co.  
E. R. Thomas Motor Co.**

**Waltham Manufacturing Co.**

These manufacturers are pioneers in this industry and have commercialized the gasolene vehicle by many years of development and at a great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacturers. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasolene automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturers or importers will be liable to prosecution for infringement.

## **ASSOCIATION OF LICENSED AUTOMOBILE MANUFACTURERS**

**7 East 42nd Street, New York.**





## STANDARD Automobile Forgings

IN STOCK

For Heavy and Light Vehicles.

CIRCULAR A SENT ON REQUEST.

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ARE YOU AN AUTOMOBILIST?

Then you need the *Blue Book*. BECAUSE — It describes about 300 touring routes throughout the East, giving running directions, distances, material, condition and grades of roads, and the name of supply and repair stations, hotels, etc., in every town.

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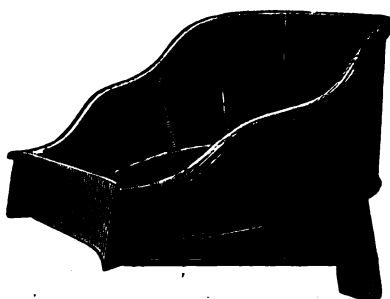
*Experimental Work Given Special Attention.*

**MACHINERY FORGING CO.**

Hamilton and Marquette Sts.

CLEVELAND, O.

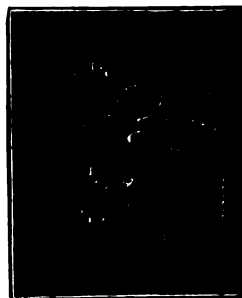
## LAMINATED WOOD BODIES



MANUFACTURED BY

AMERICAN VENEER CO., 449 Pacific Ave., Jersey City, N. J.

## CARBURETTERS



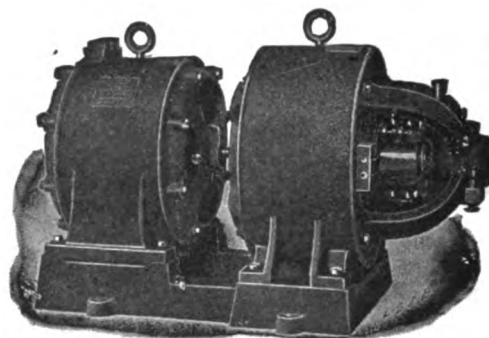
FLOAT FEED.

ALUMINUM CASTINGS.

Will positively supply highly explosive mixture from any grade of gasoline. Get a good carburettor. Get ours. It will increase the power of your motor. Money back if not satisfactory. Write today.

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MILWAUKEE, WISCONSIN.

## The Elwell-Parker Electric Co.



Converter for Charging Automobile Batteries from Alternating Current.

CLEVELAND, OHIO,

Manufacturers

of

## Electrical Machinery

## CHOICE LINE OF USED VEHICLES

INCLUDING

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Packard - - - Model C.  
Autocar - - - Type 6.  
National Electric Runabout.

PRICES ON APPLICATION

## H. B. Shattuck & Son

239 Columbus Avenue  
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## CELLULAR COOLERS and DISC RADIATORS



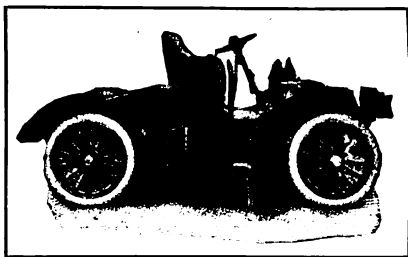
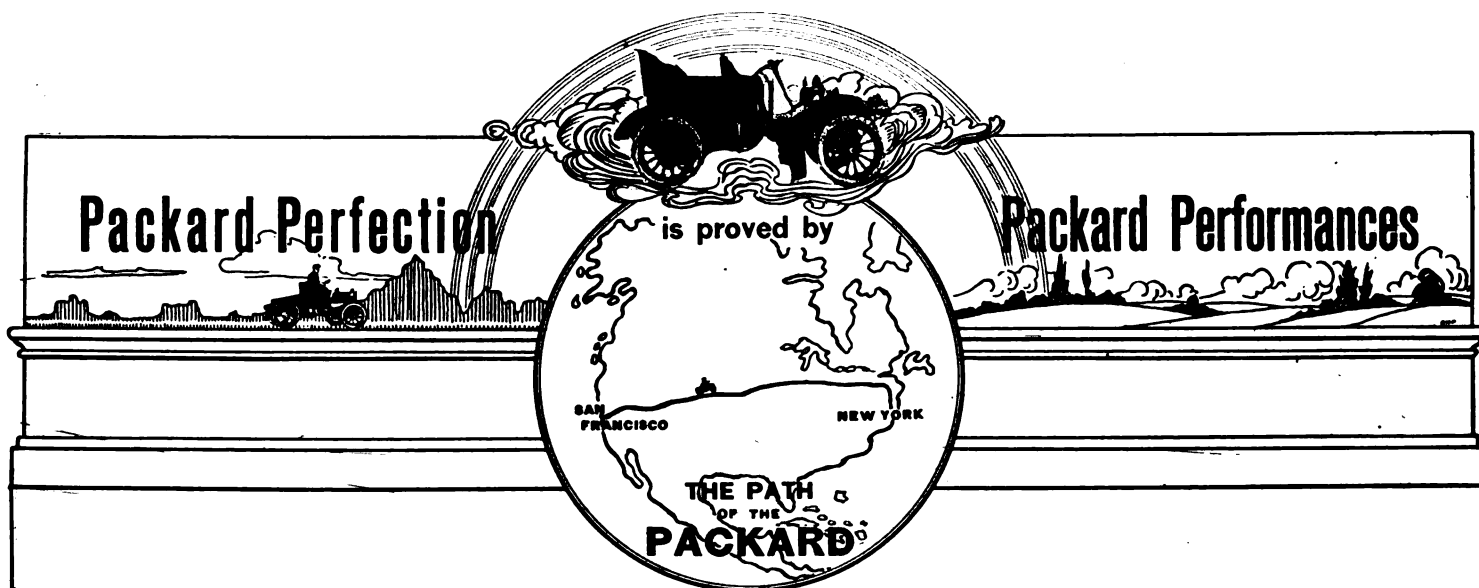
Patent Pending.

The cut represents our latest improved Cellular Cooler. It is the most efficient and up-to-date radiator made, and is less expensive than anything of similar construction.

We also make Disc Radiators and we aim to make them the best on the market.

The Whitlock Coil Pipe Co.

HARTFORD, CONN.



**T**HERE are several routes from San Francisco to New York. Some are harder than others but the shortest is the hardest of all.

It almost seems as though nature had made a special effort to condense into the distance between San Francisco and Denver, every possible form of mountain grade, alkali sink, quicksand and desert waste in order to make this the battle royal—the supreme test for all who might brave its hardships.

Many is the bleached and glistening bone which lines the old trail through the barren wastes of southeastern Utah and central Nevada, bearing silent witness where the strain of this fearful journey has severed the thread of life in some faithful beast and, perhaps, marks the resting place of its owner.

As the comparative shortness of this central route formed the incentive for the pioneer of '49, so has it, in later years, made this the coveted mark for automobiles. But twenty-two hundred miles is not a distance to be rushed even under the most favorable conditions and when every mile presents difficulties greater than are encountered on any of the other routes and far beyond the wildest imagination of the average man, it is small wonder that every previous attempt has worn out the mechanism of the car and the spirit of the man who drove it.

It is an extraordinary task and requires an extraordinary combination to meet it. The fact that it has been so universally considered as impossible has set a higher price upon its accomplishment and has furnished the incentive for our party in "Old Pacific" to do that which has never before been accomplished—before which all others have gone down to honorable defeat.

Traveling through a country without pretense of roads requires a flexibility of spring suspension so extreme as to allow the car to roll with perfect ease and freedom from strain through hundreds of miles of such traveling as would rack the ordinary rigid construction all to pieces. There must be a suppleness sufficient to enable the car to instantly adapt itself to any uneven surface and to change from one extreme to the other with a rapidity and ease of motion that will rob such traveling of its terrors and permit great distances to be covered with comparative ease and perfect regularity.

In long descents and level stretches the motor must return to a slow pulsing movement but with the maximum power or any portion of it instantly accessible and answerable to the varying position of the foot pedal control. There must be the ability to produce such abnormal power as will overcome every resistance. And withal there must be a certainty of operation, an irresistible, unfailing reliability that will conquer all difficulties and render the highest efficiency under the most adverse conditions.

The sensation of latent or reserve power, the ability to overcome greater obstacles than are met with, represents one of the great charms of driving a Packard Car.

"Old Pacific" is a standard 1903 Model F taken at random from stock. It is just like hundreds of other Packard cars, a fact which can be easily proven by their owners who live along the line of the "Old Pacific's" route to New York City.

Any Packard Car can carry

"A Message to Garcia."

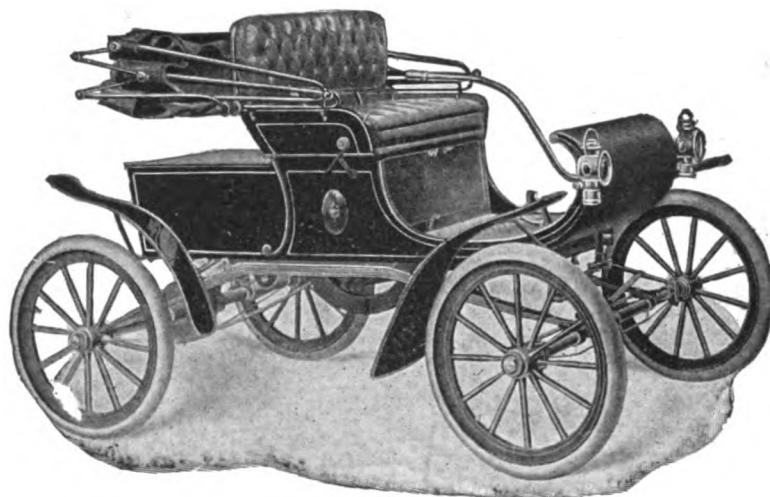


**THE PACKARD MOTOR CAR COMPANY,**  
**WARREN, OHIO.**

Member of the Association of Licensed Automobile Manufacturers.



PRICE,  
\$650.00



"NOTHING TO  
WATCH BUT  
THE ROAD."

# The Oldsmobile "Goes"

You can build an automobile strictly according to a recognized standard, but it doesn't follow that it will "go."

The correct ideas are only obtained by practical experience, and it is our 23 years in the manufacture of gasoline motors which has helped us to build up the largest automobile business in the world.

Any of the following representative dealers will show you the machine which is built to run and does it.

## SELLING AGENTS:

ALBANY, N. Y.—Automobile Storage & Trading Co.  
ATLANTA, GA.—C. H. Johnson.  
BINGHAMTON, N. Y.—R. W. Whipple.  
BOSTON, MASS.—Oldsmobile Co.  
BUFFALO, N. Y.—Jaynes Automobile Co.  
CHARLESTON, S. C.—Army Cycle Co.  
CHICAGO, ILL.—Oldsmobile Co., Githens Bros. Co.  
CLEVELAND, OHIO—Oldsmobile.  
COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
DETROIT, MICH.—Oldsmobile Co.  
ERIE, PA.—Jacob Roth.  
GRAND RAPIDS, MICH.—Adams & Hart.  
HARRISBURG, PA.—Kline Cycle Co.  
HOUSTON, TEXAS—Hawkins Automobile & Gas Engine Works.  
INDIANAPOLIS, IND.—Fisher Automobile Co.  
JACKSONVILLE, FLA.—F. E. Gilbert.  
KANSAS CITY, MO.—E. P. Moriarity & Co.  
LANSING, MICH.—W. K. Prudden & Co.  
LOS ANGELES, CAL.—Oldsmobile Co.  
LOUISVILLE, KY.—Sutcliffe & Co.  
MEMPHIS, TENN.—H. A. White.

MILWAUKEE, WIS.—Oldsmobile Co.  
MINNEAPOLIS, MINN.—A. F. Chase & Co.  
NASHVILLE, TENN.—John W. Chester Co.  
NEWARK, N. J.—Autovehicle Co.  
NEW ORLEANS, LA.—Abbott Cycle Co.  
NEW YORK CITY, N. Y.—Oldsmobile Co.  
OMAHA, NEB.—Olds Gas Engine Works.  
PASADENA, CAL.—Ed. R. Bradley.  
PATERSON, N. J.—F. W. Stockbridge.  
PHILADELPHIA, PA.—Oldsmobile Co.  
PITTSBURG, PA.—Banker Bros. Co.  
PLAINFIELD, N. J.—F. L. C. Martin Co.  
POUGHKEEPSIE, N. Y.—John Van Benschoten.  
RALEIGH, N. C.—Raleigh Iron Works.  
ROCHESTER, N. Y.—Rochester Automobile Co.  
SAN FRANCISCO, CAL.—Locomobile Company of the Pacific.  
SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.  
TEXARKANA, ARK.—J. K. Wadley.  
TUCSON, ARIZ.—F. Ronstadt.  
WASHINGTON, D. C.—National Capital Automobile Co.  
HAWAIIAN ISLANDS.—R. N. Halstead, Honolulu  
GREAT BRITAIN AND IRELAND—Locomobile Co. of Great Britain, Ltd., London, Eng.

GERMANY—All Germany except Cologne—Earnest Weingaertner, Berlin; Cologne, L. Walter & Co.  
FRANCE—Eugene Merville, Paris.  
SWITZERLAND—Automobile Fabrik Orion AG., Zurich.  
ITALY—Victor Croizat, Turin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingley & Co., Johannesburg and New York.  
NEW SOUTH WALES—Knowles Auto. & Power Co., Sydney.  
VICTORIA—Hall & Warden, Melbourne.  
QUEENSLAND—James & Sons, Brisbane.  
SOUTH AUSTRALIA—Duncan & Fraser, Adelaide.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
JAPAN—Brühl Bros., Yokohama and New York.  
ASIA—MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

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**OLDS MOTOR WORKS,** 1332 Jefferson Ave., **Detroit, Mich.**

FACTORIES: DETROIT AND LANSING, MICH.

Members of the Association Licensed Automobile Manufacturers.

# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, August 6, 1903.

No. 19

## HITS PARTS MAKERS

**Decree That Seems to Enormously Extend Scope  
of Selden Patent—Motor Makers and Others  
Styled "Contributory Infringers."**

On Tuesday, 4th inst., the Buffalo Gasolene Motor Co. "submitted to a decree" acknowledging the validity of the Selden patent and confessing infringement. The Buffalo Co. accordingly has been elected a member of the Association of Licensed Automobile Manufacturers and henceforth will operate under a Selden license. It is the only parts or accessory maker included in the membership.

The settlement of this suit is of vital and far reaching importance and affects the makers of not only motors, but of practically every other part that enters into a gasolene car.

The original suit against the Buffalo Gasolene Motor Co. was brought at Buffalo on July 12, 1900, by the Electric Vehicle Co., the former owner of the patent. The defendants filed a demurrer on Nov. 30 of the same year. This demurrer was overruled by Judge Hazel and the case has since been pending.

This litigation ran current with the suit originally brought against the Winton Motor Carriage Co., which concern some months since "submitted to a decree." It now transpires that the defendants were selected for specific purposes—the Winton Co. was made a defendant in order to prove infringement as relating to automobiles proper, and the Buffalo Gasolene Motor Co. was chosen to prove the parts makers guilty of "contributory infringement," the courts having held that the makers of an essential part or feature of a device are contributory infringers, and therefore of equal guilt.

The fact that the Selden claims do not specifically cover a gasolene motor or other part had given rise to the general supposition that it was only when the motor and other parts were brought into combination in a vehicle employing an intermediate gearing or transmission device that the patent

was infringed; in other words, the popular idea has been that the patent applied only to built-up vehicles, not to the parts entering into it.

It was to shatter this belief or supposition that suit was instituted against the Buffalo Gasolene Motor Co. When this understanding of the decree entered on Tuesday is generally appreciated it is apt to cause something akin to consternation in the parts trade. George H. Day, general manager of the Association of Licensed Automobile Manufacturers, states that, fortified with the decision, his organization will now proceed, not only against the makers of cars, but of the "contributing" parts.

Concerning the silence of the patent so far as it applies to a motor or other specific part, one of the Selden attorneys explained to a Motor World man that it is because the parts constitute "essential elements of the claim" that specific claims to specific parts are not necessary in litigation of the sort. While the patent cannot control the manufacture of gasolene motors generally, or of any particular part, it does, he said, control them when they are admittedly designed for use in automobiles.

### Officers for the Continental Co.

The Continental Rubber Works, Erie, Pa., has selected the following officers: President and general manager, Theron R. Palmer; vice-president, Alexander Jarecki; secretary, Charles Jarecki; treasurer, Charles S. Coleman. This is the recently organized company which purchased and is re-equipping the former Tribune bicycle factory in Erie, and of which the well known Charles F. U. Kelley is sales manager. Automobile tires will be, of course, included in their productions. The company is to be incorporated this week, with a capital of \$200,000.

### Century Creditor's Offered 25 per cent.

The Century Motor Vehicle Co., Syracuse, has offered its creditors a settlement of 25 per cent, and a committee thereof has recommended its acceptance. The committee states that the debts of the company aggregate \$67,500, and as the assets consist mainly of machinery and material, bankruptcy proceedings would net not to exceed 10 or 12 per cent.

## BERG WINDS UP

**Cleveland Concern Disposes of its Effects—  
Studebakers to Add Gasolene Cars.**

The Berg Automobile Co., Cleveland, Ohio, has practically passed out of existence, but with a clean record. Its debts have all been liquidated. The refusal of the stockholders to advance additional capital brought matters to a standstill and forced the issue.

The tools and patterns of the Berg company have been conveyed to the Federal Mfg. Co., Cleveland, which made many of the parts that entered into the Berg car, and it is understood that negotiations are now pending between the Federal people and the Studebaker Bros. Mfg. Co. which are likely to result in the transfer to tools, patterns and parts to the Studebakers, who contemplate adding a gasolene car to the line of electrics which they are marketing. The deal is well advanced, and a decision is likely to be reached at any moment.

Hart O. Berg, the organizer and active manager of the company bearing his name, will probably return to Paris, whence he came to assume its direction.

### Important Fisk Deal on.

Harry T. Dunn, sales manager of the Fisk Rubber Co., Chicopee Falls, Mass., returned from abroad on the Lucania on Saturday last. He was absent some two months, spending most of the time in England. The Fisk detachable tire with its remarkable fastening met with such favor that there is every prospect that it will be taken up and manufactured and the continental market supplied by an important English concern, with which Dunn was in frequent conference while abroad. The deal was not definitely closed, but there seemed practically no doubt of its consummation.

### L. A. A. M. Changes Dates.

The meeting of the Licensed Association of Automobile Manufacturers, which was fixed to occur at Niagara Falls on August 14 and 15, has been deferred until Tuesday and Wednesday of the following week, the 18th and 19th inst. The International Hotel probably will be made the headquarters.

## CONRAD CREDITORS' CHARGE

### Assert That Buffalo Concern Committed Act of Bankruptcy—Ask Adjudication.

That all of the creditors of the Conrad Motor Carriage Co., Buffalo, are not content with the appointment of a receiver developed late last week, when three of them filed a petition praying that the company be adjudged a bankrupt.

The petitioning creditors are the Buffalo Mill Supply Co., with claims amounting to \$133.45 for leather belting and pulleys; the R. D. Nuttall Co., of Pittsburg, Pa., \$676.50 for spurs and bevels; the Enos & Sanderson Co., of Buffalo, \$200.67 for wood, panels, etc. The petition charges that the Conrad company committed an act in bankruptcy within four months of the filing of the petition by asking the Supreme Court of the State of New York to appoint a receiver of the properties of the company, which the court did.

The Conrad Motor Carriage Co. has been subpoenaed to appear in the United States District Court before Judge Hazel to-day to answer the petition.

### Fire Destroyed one Car.

Automobiles worth several thousand dollars, stored at No. 73 West Fourth street, this city, were threatened by fire which started in a shed in the rear of the building last week. The driver of a gasoline delivery wagon stored there, in starting the machine, set fire to some gasoline on the floor. A large tree in the yard caught fire and the automobile in the shed and the shed were destroyed. The other cars stored in the shed were removed.

### Runabout for 'Frisco's Fire Chief.

The Electric Vehicle Co., through its San Francisco agent, A. E. Brooke Ridley, has been awarded the contract for an electric runabout for the use of the chief of the fire department of that city. The specifications call for a vehicle to carry two persons, to be capable of a speed of a mile in three minutes, able to climb a 20 per cent gradient and to possess a radius of action of forty miles. September delivery is called for.

### Mooers Returns From Ireland.

Among the passengers on the Umbria on Sunday of last week was L. P. Mooers, the driver of the Peerless car in the Bennett Cup race. He left for Cleveland the same evening, after expressing the opinion that the experience the American drivers obtained in the race would stand them in good stead when the next contest came off.

### Drove to Atlantic City.

Manager Frank C. Armstrong of the Electric Vehicle Co.'s New York branch drove down to Atlantic City last Friday with a party of friends. He used one of the Columbia gasoline cars.

## Recent Incorporations.

Buffalo, N. Y.—Automobile Livery, Tours, Sales and Storage Co., under New York laws, with \$25,000 capital. Directors—Carl T. Thorden, H. J. Hass and J. M. Edsall, all of Buffalo, N. Y.

Brooklyn, N. Y.—American Touring Car Co., under New York laws, with \$100,000 capital. Corporators—John H. Fogarty, Daniel Fogarty, Margaret E. Fogarty and William H. Flaherty, all of Brooklyn, N. Y.

Rochester, N. Y.—Regas Automobile Co., of Rochester, under New York laws, with \$100,000 capital. Directors—J. H. Sager, T. B. Dunn, C. E. Bowen and Robert C. Kershner, all of Rochester, N. Y., and L. Louis Willard, of Binghamton, N. Y.

St. Louis, Mo.—World's Fair Automobile Transit Co., under Missouri laws, with \$600,000 capital, full paid. Corporators—Thomas J. Hoolan, Charles M. Polk, T. J. Flanagan, Lawrence W. Day, Spence L. Finley, A. L. V. Mueller, James C. Espy, James Axtell, Michael Hurst, Charles Vastine and H. E. Simon, all of St. Louis, Mo.

### Said he was Sayle.

They are telling a good story at the expense of two well known Cleveland, Ohio, tradesmen. On a Sunday afternoon an automobile was seen scorching through East Cleveland, and the marshal obtained the number and waited for their return. When they did appear they were stopped by the marshal, who demanded their names and ordered them to appear in court the next morning. The names that the men gave were George Collister and W. F. Sayle. The marshal was dubious about the latter man, for he was heavy, and had auburn hair, while those acquainted with Mr. Sayle know that he has black hair. The marshal questioned him, but the man claimed he was W. F. Sayle. Later the marshal telephoned to Mr. Sayle at his home, and found that the men had given him wrong names.

### Jenatz Works Consumed.

Fire again got in its deadly work last month, the Jenatz electrical works at Brussels having been completely destroyed on July 15. The works belonged to the brother of M. Camille Jenatz, the winner of the Gordon Bennett race, but the famous driver was largely interested in it, and it was here that he elaborated and perfected the Jenatz magneto-electric clutch and other devices. The Jenatzs are clever electricians, and to their researches are due many of the improvements and developments of electric ignition as applied to motors.

### Exports Show Increase.

For the month of June the exports of automobiles and parts show a gratifying increase, in marked contrast to the losses of April and May. The figures are \$168,273, as against \$131,150 for June, 1902. For the eleven months of the fiscal year ending June 30 the usual gain is shown, viz., from \$948,528 in 1902 to \$1,207,065.

## WANT SHELBY BANKRUPTED

### Creditors of Failed Concern Make Such Application, Claiming Insolvency.

Several creditors of the Shelby Motor Car Co. filed an application in the United States District Court at Cleveland, Ohio, last week, asking that the concern be declared bankrupt. No statement was made as to the possible liabilities and assets of the company. The creditors claimed that the company had committed an act of bankruptcy and is insolvent. The creditors mentioned in the petition and the amount of their claims are: The B. F. Goodrich Co., of Akron, Ohio, \$2,101.84; the Strong, Carlisle & Hammond Co., of Cleveland, Ohio, \$1,496.51, and Frausne & Williams Co., also of Cleveland, \$359.95.

A receiver was recently appointed in the Richland County Common Pleas Court for the Shelby Motor Co.

### Winton Will not Race Again.

The second of the three Bennett Cup contestants, Alexander Winton, returned to this country on Saturday. Upon reaching New York on the Lucania, of the Cunard Line, he expressed himself definitely regarding his participation in future races.

"I am still heart and soul interested in racing events," he declared, "but henceforth I shall design and build machines for others and will do no racing myself. My manufacturing interests are now so great that I can no longer sacrifice the time."

### Ann Arborians' Revolutionizer.

Two Ann Arbor, Mich., young men have invented what they fondly hope will prove a revolutionizer in the gasoline motor trade. It is a 12 horsepower motor, built by them, and now almost completed. "What we claim in superiority is that all the valves are worked mechanically and all four of the cylinders receive the sparks from one coil. Heretofore four coils have been used. All parts of the engine are oiled automatically," Otis, one of the inventors, is quoted as saying.

### To Manufacture at Moberly.

A company is being organized in Moberly, Mo., to manufacture automobiles. The company will start with a capital of \$10,000. It is proposed to build only one style of vehicle, a gasoline runabout, to sell for \$650.

### Delivering Business Vehicles.

Deliveries of business vehicles are being made by the local branch of the Electric Vehicle Co. One of the latest trucks—with a four motor drive and power steering—was received in this city last week.

### To Handle Wintons at Providence.

The Davis Automobile Co., Providence, R. I., have been appointed agents for the Winton line. Heretofore the Providence business has been handled from Boston.



## ENDURANCE RULES EXACTING

**Next Test to be Exhaustive—Pittsburg the Destination—Oct. 7-13 the Dates.**

Final consideration of arrangements for the reliability contest to be held by the National Association of Automobile Manufacturers occupied the Technical Committee of that organization at a meeting held on Tuesday afternoon at the headquarters, 7 East Forty-second street, New York City. Secretary Harry Unwin reported upon his recent trip over the proposed route, describing the condition of the roads, the hotel accommodations en route, etc.

W. L. Smith, president of the Pittsburg Automobile Club, was present at the meeting and urged that the run should be made to Pittsburg, Pa., as originally planned. The original idea was to run from New York City to Philadelphia, Baltimore and Washington, thence to Pittsburg by way of Hagerstown, Md., but this plan was abandoned when it was found that there was no suitable stopping place between Hagerstown and Pittsburg.

At the meeting of the Executive Committee on Wednesday the matter was thoroughly discussed and Pittsburg, and not Cleveland, finally selected as the destination of the run, which will occupy a full week; October 7 to 13 were the dates chosen. The route will be via Kingston, Binghamton, Corning, Buffalo and Cleveland, 827 miles.

The report of the Technical Committee submitted for adoption the minute which follows:

"It is the desire of the National Association of Automobile Manufacturers that the first annual endurance test prompted by it shall take place as nearly as possible under ordinary touring conditions. The contest will not be in any sense a test of speed. The points to be determined are as follows:

- "1. The condition of each competing car at the finish of the test.
- "2. The cost of repairs on each car and the time required to make them.
- "3. The efficiency of brakes.
- "4. The hill climbing capacity of the cars.

"The association feels that all of the questions in which the public is vitally interested relate to cars of standard, stock pattern, regularly catalogued and offered for sale. No others, therefore, will be admitted to the test except in a special class. An examination will be made of each entry, to ascertain that it is exactly as catalogued. The examination will be repeated at the finish and every change noted by the Board of Examiners.

"A new plan, so far as this country is concerned, though it has been successfully tried in England, will be adopted in the selection of observers. Each contestant will be required, at the time of entry, to nominate an observer, for whose conduct he shall be re-

sponsible. No observer will be allowed to ride on a car made, owned or controlled by the man who nominates him. Observers will be changed every day.

"In no run so far held in this country has the condition of the cars at the finish of the run been taken into consideration. And yet this feature is, perhaps, the most important of all. On arrival at the destination the cars will be taken in charge by officials in exactly the condition in which they arrive. They will be critically examined by a Board of Examiners, consisting of thoroughly experienced, disinterested men, and will be awarded points in accordance with the findings of the Board. The chairmanship of the Board will probably be offered to one of the most famous professors of one of the universities, and the remaining positions to men whom every one will recognize as eminently fitted for the task.

"The association believes that, next to condition at the finish, reliability and freedom from stoppage and repair are most important. It has therefore decided upon a penalty of one point lost for every minute a car stops, except to avoid frightening horses and to comply with legal requirements. The repairs and replacements will be carefully noted by the observers and will, of course, be taken into consideration by the Board of Examiners.

"In the matter of classification a radical departure has been made. Weight has ceased to be a reliable basis. The association believes that the public is more deeply interested in the matter of price than in any other possible method of classification, and has therefore adopted that basis. There will be six or more classes, ranging from \$1,000 and under to \$3,500 and over.

"Repairs must be made in the presence of observers, and at no other time. Immediate disqualification will be the result of an attempt to make a repair or replacement under any other condition. Official garages will be provided, but only for the storage of cars while observers are necessarily absent, and it will be impossible for an operator to enter a garage unless accompanied by his observer.

"The association feels that the public is as dependent on the reliability of tires as on any other part of the vehicle. It can find no reason, therefore, why they should be exempt from penalty in case of trouble. Time consumed in tire repairs will therefore be penalized."

### Dates for Paris Show.

December 10 to 25 are the dates set for holding the sixth annual automobile show at Paris. It will be held, as usual, at the Grand Palais, under the main control of the Automobile Club de France, with the assistance of various syndicates in the automobile and cycle trade.

The best spaces in the centre will be rented for 50 francs the square metre. The exhibition will also include automobile boats, ballooning and various sporting and touring articles.

## AIDING THE ASSESSORS

**New Jersey Officials use Auto Registration List to Locate Tax Dodgers.**

A new role may be played by the motor vehicle. Its enforced registration in many States fixes definitely its ownership, and this fact is taken advantage of to aid tax gatherers who find citizens unwilling to pay personal taxes.

Fully two thousand New Yorkers own New Jersey licenses for automobiles. As these vehicles represent an average of \$1,500 each, the Secretary of State calls attention to the fact that assessors of personal property have not taken advantage of the records in his office to get names and addresses of automobile owners, so as to assess these amounts in their personality. The Secretary says that New York assessors can quickly add \$3,000,000 to that city's ratables by seeking information at his hands.

So far no assessors excepting the Board of East Orange have thought of this method of increasing the ratables. These assessors went to Trenton two weeks ago and secured the names of every automobile owner located in their municipality, and, as the affidavits attached to application for license disclose the value of machines, it was a very easy matter to make correct assessments.

There are more than one thousand machines registered from Essex County, and, as their average value is \$1,000, it is asserted that the Essex assessors can readily add a million dollars to the ratables of Newark. Hudson assessors can also add nearly half a million. The records show that by far the greater number of cars are registered from the northern part of the State.

### Says Edison Borrowed his Ideas.

According to charges brought by James W. Gladstone, of East Orange, N. J., the "Wizard of Menlo Park" has been "borrowing" from others' brains in his effort to produce a battery for automobiles by the waving of his more or less magic wand. Gladstone's charge is contained in the suit brought in the United States Circuit Court at Trenton, N. J. He seeks to restrain Thomas A. Edison from manufacturing certain galvanic batteries, alleging that Edison is infringing upon patents owned by him. He says that they are for inventions made by Felix de Solande, of Paris, and purchased by him last June. They cover galvanic batteries and are said to be used in the manufacture of storage batteries for automobiles. Gladstone asks that the Edison Manufacturing Co. be compelled to make an accounting and pay to him all the profits from the sale of the improvements.

### Oldfield Goes With Winton.

Barney Oldfield, holder of the world's mile and other track records, has entered the employ of the Winton Motor Carriage Co. Announcement of the fact was made on Wednesday, and it is understood that he will drive a Winton car in the remainder of the season's races, and also make an attack on the existing records.

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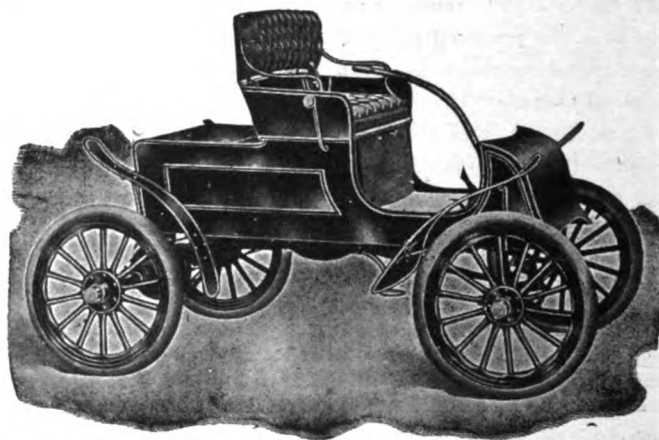
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CABLE ADDRESS, "MOTORWORLD," NEW YORK

Entered as second-class matter at the New York, N. Y., Post Office, November, 1900.

NEW YORK, AUGUST 6, 1903.

"I receive some five different automobile papers, but enjoy none more—in fact, not quite so much—as I do the Motor World. I read the advertisements before I do the reading matter, and consider them of equal interest, but too many of them are full of platitudes and 'stock phrases' of praise. It seems to me there is much room for improvement."—Albert P. Wood, Detroit, Mich.

### Deceptive Spinal Columns.

How deceitful are appearances! Two months ago it seemed as if automobilists really possessed backbones. To-day what appeared columns of bone and marrow seemed to have been converted into columns of gelatine that have melted with the rising of the thermometer.

The men of millions and the organizations pledged to "ascertain and defend the rights of automobilists" that once indulged in brave talk—that purposed opposing class legislation and instituting test cases to prove this a truly republican country and the roads

free for all men, regardless of class, color or means of locomotion—all, all are stilled. Not a whimper, not a suggestion of fight is now heard in the land.

The "brave talk" appears to have been mere bluster, the backbones mere wax that has slipped down into the brave ones' shoes.

How proud of themselves should be the fighting millionaires and the vallant defenders of the rights of automobilists!

### Second-Hand Cars.

Surrounded with difficulties as is the task of selecting a new automobile, it shrinks visibly when compared with that which confronts the prospective motorist desiring to make his introduction to the pastime through the medium of a second-hand car.

In the first case there are numberless signs and indications which, if intelligently studied, frequently enable one to avoid the pitfalls that mark the purchaser's path. The live makers, those who, instead of either going backwards or standing still, have progressed and are still progressing, are not hard to perceive. Values are determined, in the main, by considerations which even the uninitiated can understand. The size, the weight, the power, the speed, the carrying capacity—all form items in the inventory of value, and a very little study furnishes the would-be motorist with his cue. In addition, and most important of all, the reputation and standing of the maker go a long way in finally determining the matter.

But with second-hand vehicles these considerations have much less weight. The decadent cars naturally come to the front in great numbers and are offered at tempting prices. Obsolete patterns are frequently in the majority. The anxiety of their owners to dispose of them is in obverse ratio to their sale value, the latter being sometimes practically nil. This is particularly the case with cars produced by companies on the down grade. Every week that they lag superfluous on the stage makes more remote the chances of doing anything with them except consigning them to the junk shop.

If this be true of cars of dubious, or more than dubious, ancestry, it is scarcely less so where cars of reputation are concerned.

These seem safe purchases. For that reason buyers who know a little about makes are the easier thrown off their guard. The purchase of a standard vehicle at a reduction of from one-half to two-thirds of its list price seems a perfectly safe one, and as a rule it is. But there is the question of con-

dition to be taken into very serious consideration. The car may have been recklessly abused and be in such condition that only the expenditure of much money and time will avail to put it in good running order. The assumption is, when the purchase is made from a regular dealer, that this has been done. But assumptions are sometimes ill-based, and no buyer can safely do otherwise than go beyond such assumption and satisfy himself that it has something behind it. If repairs have to be made they should, as a matter of course, be added to the purchase price, and it is necessary, if a true estimate of the value of a car is to be obtained, to see that the repairs are exhaustive and that they leave the car in practically as good running order as when it left the factory.

When such a course as this is adopted the purchaser knows exactly where he stands. But it is seldom done. The buyer does not know enough to perceive the advantage of such a plan; and the seller, whether dealer or user, is almost equally opposed to it. Price cuts an important figure, and the greater it is the more difficult it becomes to sell the car to the average purchaser.

The result is well known. The car fails to give satisfaction and the buyer, disgusted with his bargain, rails at the seller. Fortunate is it if he does not also rail at automobiles in general and his automobile in particular. A little forethought and care at the beginning might have prevented it.

### A Change of Tune.

There are signs of the times that there is a reaction in the public press regarding the automobile. Time was when the headlines in the dailies announcing automobile accidents were large and lurid, and when the slightest locus-pocus in which an automobile figured was made the subject of bloodthirsty editorials. Men might be killed by trolley cars, by the falling of elevators, by the collision of boats, or by this, that and the other thing, and these many forms of manslaughter found record in the dailies in obscure paragraphs. On the contrary, if an automobile ran into a human, or frightened a horse so as to cause accident to his driver, or, in short, if an automobilist was guilty, either directly or remotely, of any accident or damage whatever, the editors of the dailies in the particular place where it happened demanded instant abolishment of the motor vehicle or the reduction of its speed to within a shade of zero miles an hour.

### Demonstrators who do Harm.

Demonstrators are a very important part of the automobile business, and among them are found many careful, conscientious and intelligent men. The personality of the prospective purchasers taken out by them is studied, and a good idea gained of the sort of demonstration that is likely to please. Consequently they attain their object, which is, of course, to make sales.

But there is another and quite different class of demonstrators, and it is with these that we have to do just now. They are emphatically the reverse of the class first mentioned, being reckless and foolhardy to a degree, and in the matter of results accomplish quite as much harm as the former do good.

These youths—for as a rule they are of the callow stage—frequently look upon their task as a joke, a joke on the would-be buyers who entrust themselves in their keeping. Frequently it turns out a joke for their employers, for instead of a sale made a good customer is lost. But even when this happens the demonstrator falls far short of a realization of the enormity of his offence. When it makes any impression on him at all, it is of a transient character, gone almost as soon as received.

To put a customer through a "course of sprouts" is the delight of demonstrators of this class. To "show off," "do stunts," dash around corners at full speed, graze passing teams, descend hills at full speed, make sudden and unexpected stops, send the car along at its highest speed—these and similar tricks are the delight of demonstrators of this character. They "try out" passenger and car at the same time, and if the "nerve" of the one is equal to the serviceability of the other they are quite satisfied. No thought is given to the nervous strain put upon the former. It is assumed that he likes to be startled out of a year's growth, and if he should "squeal" he is regarded with contempt, mixed with satisfaction at having got the best of him.

It need scarcely be said that the average man resents treatment of this sort. We are cognizant of a case where a demonstrator who made a practice of this sort of thing was complained of and given a very severe lecture by his employer. He was told that his business was to show how kind and gentle an automobile really was, how easily managed by non-experts, what a law-abiding vehicle when given half a chance.

The pity of it is, however, that few of the victims have the courage to confess their

lack of "nerve" by making a complaint. They suffer in silence. But they register a vow never to place themselves at the mercy of that particular roysterer; and some go further and eschew automobiles altogether.

For the good of the industry such hoodlumism should be stamped out.

### As to Cushioning.

Better cushioning of car seats is a matter that is receiving, as it deserves, increased attention. Comfort is denied by some of the cushions now in use, while luxury is a quality attained by a very small number. Many makers forget that the automobile runs much faster than a carriage, and that its passengers travel further, as well as faster, than do the occupants of the horsedrawn vehicle, and in providing seats cushioned only slightly better than those of the latter they lay the groundwork for the fatigue that frequently ensues.

During the present year there has undoubtedly been a marked improvement in this respect. The great vogue of the tonneau body and the remarkable growth of the touring spirit has unquestionably made for this improvement. Tonneaus are roomier than they were last year, and it would not be natural for designers to make a betterment here without taking the next logical step, i. e., the betterment of the cushions. As a matter of fact, they have done this, and higher, thicker, softer and more durable cushions have been fitted to many cars. Some of them make at least an approach to luxuriosity, and with them passengers can endure rides of many hours' duration without undergoing any great fatigue.

Nevertheless, there is still very much to be desired in this direction. Vibration is the great enemy of the automobile, and until roads of the "sandpaper" variety become universal it will be necessary to use more interceptors than the air tire, great boon as that undoubtedly is. Springs do their share, when they are well designed. But it remains for good upholstery to put the finishing touches, and nothing is too fine for the motorist who pays his good money and has reason to expect the best that can be made.

### Reliability and Confidence.

As any oldtimer will testify, automobiles have undergone marked improvement during the last two or three years. Prior to that time a journey of a hundred miles was an undertaking of moment, with the chances against reaching the destination. Even men

thoroughly familiar with their cars had but little assurance of success. A car might go through all right; but its reliability was in such dispute that wagers against it would have been freely offered. But to-day a marvellous change has taken place. Any good car in the hands of even an indifferent driver will start upon a journey of hundreds of miles with the chances of success largely in its favor. Few people hesitate on account of doubt as to the outcome. At times overconfidence is felt, and too ambitious attempts are made; and it is not surprising that sometimes the natural result—failure—follows. Nevertheless, public confidence in the motor vehicle has been tremendously increased, and the faith is undoubtedly well based.

Genuine endurance tests—tests that really test the long-distance capabilities of motor cars, and relentlessly reveal weak points—have been numerous this summer. In the face of them, and their almost universal success, it would seem as if the automobile typified by the fun makers had about seen its day. As these gentry must have some vehicle for the expression of their wit, however, we venture to suggest that the flying machine is even better game than the automobile was half a dozen years ago.

Touring motorists soon learn that if they ask for stove gasolene the average country store can supply them with a fair substitute for the regulation 72-test kind. It is not as good as the latter, of course, but it will work satisfactorily in most carburettors and motors, and that is all that the average tourist needs. Stove gasolene is extensively used, especially in the Middle West, the farmers burning it in their gasolene house lamps. In price it is usually materially cheaper than the grade prepared for motorists.

It seems odd that in England and France, as in many legislative minds and newspaper offices in this country, the idea obtains that for the sake of unlimited speed or extreme limits of speed the automobilist is ready to sacrifice or surrender his birthright and accept whatever brands or burdens may be imposed on him.

Edison has pried open the lid of his box and popped up again, and again to the retarding of the automobile trade. Will the man never learn that a mile of performance is worth ten million miles of promise?

## CARNIVAL AT DEL MONTE

### California Resort to Have Full Fledged Automobile Race Meet—The Program.

In connection with the forthcoming Carnival of Sports at Del Monte, Cal., scheduled for this week and next, a number of automobile events will be conducted and are being featured prominently. They are under the supervision of the Automobile Club of California, and it has been arranged to run to San Jose on Thursday afternoon, August 6, and then, in company with the Oakland and San Jose clubs, proceed to Del Monte, reaching there Friday evening. Saturday the clubs will attend the sports in a body, witnessing the pony and polo racing, and Sunday will be devoted to making a trip over the famous seventeen-mile drive.

On Monday morning a hill climbing contest will be held at Carmel Hill, starting at 10 o'clock. It will be open to all types of cars. The prize will be a silver trophy presented by E. Courteney Ford. In the afternoon a complete racing programme has been arranged, to be run off on the Del Monte track; beginning at 2 p. m. The events are as follows:

2:00 p. m.—First race, two miles. For gasoline machines only, 1,200 pounds and under. For a silver trophy given by the Pioneer Automobile Company.

2:20 p. m.—Second race, three miles, open event. For machines 1,200 pounds and under. For a silver trophy given by C. S. Middleton.

2:45 p. m.—Third race, five miles, open event. For machines 1,500 pounds and under. For a silver trophy given by the White Sewing Machine Company.

3:15 p. m.—Fourth race, one-mile obstacle race. For a silver trophy.

3:45 p. m.—Fifth race, five miles, open event. For machines twenty horse power and under. For a silver trophy given by the National Automobile Company.

4:15 p. m.—Sixth race, ten miles, open event. For machines irrespective of power or weight. For a cup offered by F. A. Hyde, president of the Automobile Club of California.

4:45 p. m.—Seventh race. Five-mile exhibition against time.

5:00 p. m.—Eighth race, five-mile handicap. Open to all machines having participated in any of the foregoing races. For the Del Monte trophy. This trophy must be won twice on the Del Monte track by the same individual before becoming his absolute property.

### Schwab Cuts Atlantic City Record.

Charles M. Schwab made an automobile run from Camden to Atlantic City on July 30 in one hour and twenty-two minutes. The run of fifty-seven miles was made in Mr. Schwab's big touring car, and he was accompanied by his New York physician and a chauffeur.

The time made on this run was the fastest yet made between the two points. Mr. Schwab made a record of one hour and fifty-five minutes last year. During his latest run he made a mile a minute on some stretches of the road.

### Dates for Fall Race Meets.

An active fall racing season is assured, the dates for five meets having been decided upon, with a sixth, that of the Empire City trotting track, Yonkers, N. Y., yet to be selected. The sanctions granted by the Race Committee of the A. A. A. are as follows: Cleveland, September 4 and 5; Detroit, September 7 and 8; Syracuse, September 11; Rhode Island Automobile Club at Narragansett Park, September 19, and the Long Island Automobile Club at Brighton Beach, October 3.

### Louisville to Have Race Meet.

A new feature is to be inaugurated by the New Louisville Jockey Club, of Louisville, Ky., at Churchill Downs, the club's race track, on Saturday, August 15. Automobile races and speed tests will be the attraction instead of speedy thoroughbreds. Barney Oldfield and Tom Cooper will race in big automobiles, and Oldfield will race against time for new world's records, from one to ten miles.

It is planned to have a big parade of automobiles in the city prior to the races.

### Pneumatics Score in Paris.

Pneumatic tired cabs have become so popular in Paris that they have led to a partial strike, the drivers declaring that those without pneumatics had no chance of doing business against those equipped with them.

The Société Générale, which owns seven thousand cabs, announced that it is going to spend a million francs in putting on pneumatic tires, while the Urbaine Co. promises twelve hundred pneumatics by the end of August.

### Course for the Next Cup Race.

At the time regarded as a very "previous" offer, that of the Grand Duke of Mecklenburg-Schwerin recorded in these columns a couple of months ago has turned out to be most timely and appropriate. It will be recalled that, confident that a German car would prove the winner of the race, he intimated that he would allow the 1904 race to be run off on his estate. He has now made a formal offer of territory for this purpose.

### May be Races at Newport.

While Newport can show as many and as fine automobiles in the season as any city in America, it does not yet possess an automobile club. The matter of organizing one for the purpose of holding automobile races at Aquidneck Park is being seriously considered. These races have always been very successful in the past.

## LAFFREY HILL COMPETITION

### French Authorities Grant Permission and Event is Scheduled for August 9.

The Laffrey Hill climb, it is announced, has been officially authorized by the French authorities, and will be held on August 9. There will be several categories covering speed, tourist and public service vehicles, in the tourist section the cars being required to carry two passengers if employing one cylinder, three passengers for two cylinders, and four or more passengers for four cylinders. With the omnibuses there will be only one category, for vehicles carrying fifteen passengers or their equivalent in weight, viz., 900 kilogs. The Coupe de Caters, which was unable to be run for during the Nice week owing to the sudden suppression of that meeting, will be competed for during this meeting over one kilometre on the Laffrey Hill.

### No Deauville Contests This Year.

There is little likelihood of the famous Deauville (France) races taking place this year. The terrace there is only a mile long, whereas at least a mile and a half will be necessary for starting and stopping, in view of the increased power and speed of machines compared with last year. The Mayor of Deauville was asked whether sanction for a race on the road between Deauville and Villiers could be obtained, and replied that he knew the Prefect would decline to give authorization.

### Disposal of Race Meet Money.

What to do with the snug sum of money netted from their May 30 race meet is a matter that is interesting members of the Dayton (Ohio) Automobile Club just now. Some favor its being put aside as a nest egg, to be used ultimately in building a clubhouse; others think it could advantageously be used in leasing country quarters. The latter plan seems to be the most popular.

### French Competition for 1904.

Already an important competition for 1904 is announced. In March next La France Automobile will promote an international contest of durability and consumption, etc., between Paris and Rome, for which that journal offers a first sum for prizes of \$4,000 in cash. The route will be from Paris to Rome, via Dijon, Lyons, Avignon, Marseilles, Nice, Genoa and Florence.

### Oakley Falls Into Line.

At the Hamilton County Fair at Oakley, Ohio, on August 18, there will be a number of automobile races, as follows:

Two-mile race for light steam cars, five-mile race for light gasoline runabouts, three-mile race for medium-weight steam cars, five-mile race for medium-weight gasoline cars, and ten-mile race for gasoline touring cars.





FROM  
**SAN FRANCISCO**  
 IN A  
**WINTON**

**T**HE recent triumph of our standard, regular model 20-horse power Touring Car is without parallel in American automobile history. When Dr. H. Nelson Jackson, of Vermont, who was spending the season in California, decided to attempt the transcontinental trip, he consulted neither manufacturer or sales agent, but purchased a second-hand Winton Touring Car at a premium price, and after three days preparation bid farewell to friends in San Francisco and started upon the long ride toward New York City.

At the time of starting the main route over the Sierras which follows the line of the Southern Pacific Railway was congested with snow and closed to all traffic. It was necessary, therefore, to make a long detour north into Oregon to find a passable trail across the high ranges. The route necessitated crossing the Great Desert where the disheartening difficulties of sand, alkali and sage brush wastes were battled with and mastered. This route led far away from railroads and possible bases of supply, but the plucky tourists plunged into the open country and "took chances." The thrilling experiences in that remote and desolate country, as recited by Dr. Jackson and Mr. Croker, his traveling companion, contribute a most interesting chapter to the world's history of automobile touring.



**THE WINTON MOTOR**  
 FACTORIES AT  
**CLEVELAND,**

TO  
**NEW YORK CITY**  
IN A  
**WINTON**



**I**T was not a specially constructed car with attachments designed for special service in the mountains and upon the deserts. The men who occupied the seats were not selected factory mechanics who had spent weeks and months in preparation. There was no elaborate system of relays for duplicate parts, new tires and general supplies. Dr. Jackson started out with one extra tire, four extra spark plugs, a shovel, an axe, a block and tackle, a cooking and camp outfit and a bulldog. When he came "out of the west" he narrated the interesting facts of his remarkable journey—he told his own story in a modest way, there having been no paid advertising agent in the party whose duty it was to disseminate fiction.

Dr. Jackson kept a detailed and accurate record of this, the first successful ocean to ocean automobile journey. It is interesting to read. He has kindly consented to its publication and those who care to have it may obtain a copy of this illustrated record by addressing the Winton Motor Carriage Co. Ask for "The Transcontinental Automobile Record." (It will be published in the forthcoming number of the Auto Era.)

**CARRIAGE COMPANY,**

HEAD OFFICE:

**OHIO, U. S. A.**



## A TAG LAW SUSTAINED

### First Knock Down in Chicago's Automobile Law —The Fighters Still Determined.

A legal decision has been rendered in connection with Chicago's automobile war which is a defeat, although not a decisive one, for those automobilists who are fighting the city ordinance passed in June last. The feature of the ordinance to which the automobilists object is the requirement that all automobiles operated in the city of Chicago shall display numbers and letters, for purposes of identification.

Albert C. Banker and about fifty others have sought to restrain the city officials from enforcing this ordinance by applying to the Circuit Court for an injunction. Judge Tuley denied the application on July 29, and in his decision upheld the validity of the ordinance. Orders were immediately given to the police to arrest all automobilists who failed to comply with the law. During the next two days several arrests were made, and among those gathered in was Mr. Banker.

Banker, who has been a leading spirit in the war, courted arrest, as he has repeatedly done since the ordinance went into effect, but it was not until Friday last that he effected his object. He, however, has an advantage over other victims of the law in that he had obtained in his individual case an injunction from Judge Healy which gave him the privilege of operating his machine without a license. This injunction was secured before the concerted movement of the automobilists was begun. His ride on Friday was evidently designed to invite arrest, and he was taken into custody by Policeman Fitzgerald, who, with Lieutenant Sullivan, who subsequently ordered him locked up, is in a quandary over the question whether a contempt of court is not involved in this arrest at least.

After giving bonds, Mr. Banker was released, and on emerging from the police station he was all smiles. "I have tricked the police," he said. "They have made themselves liable to contempt of court by arresting me. An injunction of Judge Healy's gave me the privilege of operating my machine in the streets of Chicago without a license." The automobilist asserted that Judge Tuley's recent decision gave the police a right to arrest him for operating his machine "without a license number attached," but that they violated Judge Healy's injunction when they booked him on the simple charge of running his automobile "without a license."

This legal quibble was disputed by City Electrician Ellicott. "Mr. Banker's arrest," said Mr. Ellicott, "was ordered by us after consultation with our attorneys. He will be prosecuted for running his automobile without a license number attached."

The fact of the matter is that the situation relative to the regulation of automobiles in Chicago is peculiar and somewhat muddled. Two ordinances have been passed. One was passed in June, 1902, requiring automobilists to have licenses. The Circuit Court held the ordinances invalid. In June of this year the Council passed another ordinance, making it compulsory for automobilists to have license numbers attached to their vehicles. Judge Tuley held this ordinance valid.

As to Judge Tuley's decision, while the effect of it will be that automobilists must conform to the requirements of the ordinance for the present, it does not end the war, as the automobilists will not permit the matter to rest until a final decision is obtained from the Appellate Court.

Judge Tuley held that on account of their construction and the speed acquired by these vehicles it is a proper exercise of police power to enforce such regulations as will enable officers to trace and identify violators of the ordinance. In the opinion handed down the court holds that the Council has no right to deny the use of the streets to the public, but that it is within the jurisdiction of that body to see that every precaution is taken for the safety of those who use the thoroughfares of the city.

After hearing the opinion in the case it was stated that after a final decree is entered an appeal will be taken by the plaintiffs to the Appellate Court.

Up to July 29, according to the estimate of City Electrician Ellicott, some 300 or 350 automobile owners in Chicago had failed to comply with the ordinance. The number of automobiles licensed to that date was 1,400.

### Motorists Become Wary.

Two policemen named Welsh and Reeves have been making themselves busy at East Moriches, Long Island, because of a complaint made to them by the local postmaster that automobiles were running past the post-office at high speed, regardless of the signboards warning operators to slow down to eight miles. The policemen take different stations near by whenever they go on the warpath, knowing that the automobilists are inclined to warn each other where to be on the watch for officers on station. Some of the happenings are of an amusing character.

In one case, a woman was heard to say to the operator: "There is no one on this dam, open up." "No," said the man of the party, "I am not going to risk it," and Officer Reeves was behind some bushes, stop watch in hand, and heard the conversation. At the other end of the dam stood Officer Welsh, with stop watch in hand. He stepped out and was saluted with: "You didn't catch me this time." "You're all right, all right, this time," responded the officer.

### From Gay Paree.

The latest Parisian novelty is the automobile baby carriage. It is operated by the nurse on a seat at the back. The speed is very moderate.

## BAILEY BUYS AN AUTO

### Author of Obnoxious Bill Becomes a Motorist and Nearly Wrecks His Car.

State Senator Edwin Bailey, jr., author of the unpopular New York Automobile law, has joined the army of automobilists. For about two weeks he has been the owner of a motor vehicle, and is learning to run it himself. In spite of the ill feeling concerning the Bailey law, automobilists, who are wonderfully fraternal in their spirit, will sympathize with him in the difficulties which he has begun to experience. He was severely shaken up by running into a large willow tree in Sayville, Long Island, last Thursday evening, and the front of his automobile was wrecked.

There is something in this event to suggest the truth of the saying that the whirligig of time brings round its revenges. The automobile has avenged its votaries for the vagaries of legislation. Automobilists will not rejoice, however. But if Senator Bailey had run into the way of a policeman and got arrested for violating his own law—well, that would be another story.

### Got Small Satisfaction.

A roast for the automobilists of Kansas City, Mo., was the only result of their application to the local Board of Park Commissioners on July 22 for permission to have a hill climbing contest on one of the roadways in Penn Valley Park. There was no commissioner to second the motion to grant the request. "There are good hills in the country; let them go out there," said one of the members of the board. Another declared that the automobilists were taking the privilege of going where they pleased anyway.

From what occurred subsequently at the same meeting it would appear that the automobilists were really under no obligation to obtain permission for their proposed hill climbing contest in the park. An organization of colored people, who requested the use of Spring Valley Park for a picnic, failed to get a permit, members of the board declaring that the parks were already open to the public, and no special permission was needed by those who wished to use them.

### A Compendium of Laws.

The Law Committee of the American Automobile Association has just issued a little volume in handy pocket size containing the automobile laws of the States of New York, New Jersey, Pennsylvania, Connecticut, Massachusetts, Rhode Island, Vermont, Maine and Delaware. In addition to the complete law of each State, there is also a brief digest giving the principal features in brief. A second pamphlet containing the laws of the Western States is to be issued.

Pennsylvania's capital, Harrisburg, has thirty-eight registered automobiles.

## TOURISTS REACH IOWA

### Packard Party Makes Slow Progress Owing to Heavy Rains and Mired Roads.

The Packard cross-continent tourists, E. T. Fetch and M. C. Krarup, have made comparatively slow progress since entering Nebraska, on the 28th inst.



REMOVING BOWLDERS FROM THE PACKARD PATH.

After crossing the deserts and the Rockies it was thought that they would enjoy relatively easy going, but the deep, slippery, clinging mud which has since been the travellers' portion has proven not less trying than the sands and boulders that had been left behind.

The men reached Kearney, Neb., on the night of July 28, and while some stretches of dry road were encountered, there was mud enough and sinkholes and puddles enough to daub them from head to foot. They arrived in Omaha on the 31st, after an almost continuous downpour of three days' duration, which converted the roads into quagmires, and of course made heavy and disagreeable going. They remained in Omaha all of the next day, an all-night rain having made the gumbo roads impassable. They spent the day in cleaning and overhauling the car and in making it presentable; the batteries were also renewed at this point.

Iowa was entered the next day, August 1, and for several hours the highways were in condition that permitted of fair running, and nothing more momentous than the breaking of another cyclometer—the fourth one—occurred. Then the "bloomin' rain came down again," and when Adair, Iowa, was reached, on the evening of the 3d, the wheels of the car were solid disks of mud. The day had been a toilsome one; several times

it was necessary to dig the car out of the mudholes into which it slid and stuck fast.

### 'Frisco's Union Garage.

San Francisco is to have a new three-story building erected in accordance with plans especially adapted to the requirements of the automobile interest. It will be built by a corporation known as the Pacific Automobile Co., which includes such men as E. P. Brine-

The building, which is to cost about \$50,000, will occupy a large plot, and will have more than 100,000 square feet of floor space. The entire investment will represent about \$120,000. The ground floor of the building will be devoted wholly to automobile storage, and will have a capacity for over three hundred machines. These vehicles will be arranged in a semicircle something after the fashion of a modern locomotive roundhouse.

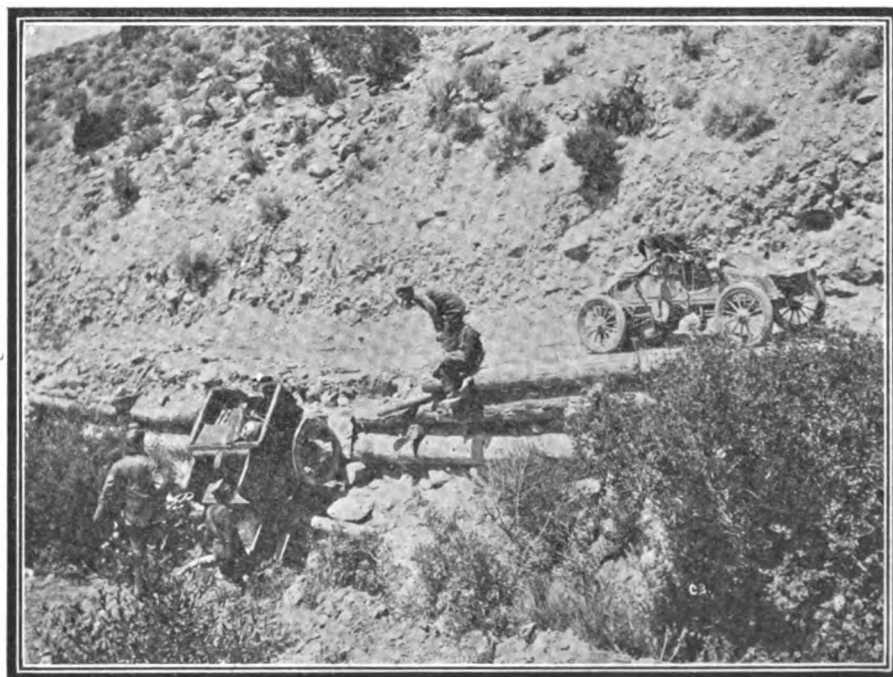
There will be reception rooms for ladies and gentlemen, and everything modern in automobiling convenience will be provided. Woodworking and upholstering departments are to be introduced in a large scale. On the premises also will be a café and grill, where superior and prompt service is promised. Other portions of the building will be devoted to the machine shop, supplies and fittings, renting department, blacksmith shop, etc., while a clubroom and library will be one of the leading features of the enterprise.

The following leading agencies will be represented in San Francisco by the Pacific Automobile Co.: The Winton Touring Car Co., the Olds Motor Works, the Vehicle Equipment Co. and the Locomobile Co.

### Bound for Home.

On Thursday last Dr. H. Nelson Jackson, the Winton transcontinental tourist, started on the last stage of his long journey. He left this city en route for Burlington, Vt. He said he expected to reach his home by Sunday, and would follow the east bank of the Hudson to Albany, and then along Lake Champlain to Rutgers.

The White Sewing Machine Co.'s New York branch is still behind its orders. About two weeks' delay is the best it can do for customers.



OFFERING ASSISTANCE TO A WRECKED CAR.

## DILL'S LONG TOUR ENDED

### Safe Arrival of the East Orange Automobile Party at the Rangeley Lakes.

James B. Dill and his automobile party completed their long ride from East Orange, N. J., to the Rangeley Lakes, in Maine, at 2 o'clock last Friday afternoon. The party started on July 16, Mr. Dill being accompanied by his three daughters, John M. Schmidt, secretary of the Automobile Club of New Jersey, an expert machinist, a valet and two maids. They occupied Mr. Dill's new White, operated by Mr. Dill himself; a new White touring car, accommodating five persons, which was operated by one of the Misses Dill, and a White steam Stanhope, driven by the mechanic, and used as a conveyance for the luggage and tools. Winthrop E. Scarritt, of East Orange, vice-president of the Automobile Club of America, of which Mr. Dill also is a member, accompanied the party to Boston in his White steam car.

Mr. Dill, who owns a summer place at the Rangeley Lakes, has frequently made the journey thither with his horses. The plan of making it in automobiles resulted from a conversation which occurred in the rooms of the Automobile Club of America on the value of endurance runs. Mr. Dill favoring more practical tests. He asserted to Mr. Scarritt and H. W. Whipple that the endurance run of last summer was not such a test, and declared that he could select a route which would afford one. He contended that what is wanted in the form of an automobile is a machine that will do the work of a horse, and that, while some of the crack machines seen on the road may be handsomely painted, nevertheless paint will not aid their motive power. He consequently picked out this route as one which would actually determine the merits and possibilities of an automobile, and, while his friends had assured him that he could not reach the lakes, he, though admitting that three-fifths of the cars might not be able to do so, had sufficient confidence in his own automobile and his ability to run it to believe that he would succeed.

During some of the early stages of the journey Mr. Dill encountered a few difficulties of importance, as the Motor World has recorded, but all were overcome. The most serious was the climbing of Norwich Hill, which is 1,846 feet high, and more than 17 per cent grade. The automobilists climbed Jacob's Ladder in a heavy storm. It was so steep they had to lace the wheels. No very fast time was made at any time during the journey, nor was there any effort to complete it in a given time. Stops of considerable duration were made at various points along the route. The fastest time made was along four marked miles, which were covered in eleven minutes.

The party, when last reported in the Motor

World, had started from Boston for Portsmouth, N. H. Passing through the latter city, Rochester and Plymouth, they climbed by the celebrated Flume of the White Mountains up to the Profile House, starting in a heavy rain. From the Profile House their route led to Whitefield, turning squarely to the left of the one they had followed from Portsmouth. At Whitefield another square turn, this time to the right, was taken to Lancaster, and thence to Colebrook. From this point the party, bearing sharply to the right, went through Dixfield Notch to Lakeside, having described the two sides of a nearly equilateral triangle in the journey from Lancaster. Then a curve which was nearly a letter U, bearing first to the right and then to the left, was taken to Newry Corner and Andover, where the night was passed. The next day there was another sharp turn to the right to reach Rumford Falls, Maine; then to the left for Dixfield, and still more sharply to the left for Weld and Phillips, another sharp turn to the left bringing the party to Rangeley. The actual distance travelled from the Profile House to Rangeley was about three times the airline distance.

From Lancaster to Colebrook the automobilists found a very hilly country, almost impassable for automobiles. The grades were very sharp and the hills close together. In many places they had to go down hill with the brakes on, and then go straight up, having no place to get up steam. While going up one of these hills under a heavy head of steam the universal joint blew off the touring car when the motor was reversed to avoid a collision with a railroad train. This involved taking off the driving pinions, putting out the fires and putting on a new universal joint, all of which was done in twenty-three minutes.

From Lakeside to Andover was another rainy trip. The party found the roads from Weld to Phillips very muddy, in fact, the worst on the trip. It had been raining, and there was mud and clay along the way, so that they had to lock the wheels and reverse the motors to avoid skidding.

From Dixfield to Weld the automobilists got off the road for nine miles and went nearly to Bear Mountain because a guide board had been changed so as to point in the wrong direction.

Mr. Dill stopped 132 times to let horses be led by. There was only one runaway on the trip, and this was entirely the fault of a boy who was driving a horse in a hay field, raking up hay. When the automobiles were passing the boy left the horse, went to the road and sat down to see the machines go by. The horse soon began to walk, then to trot and then to run, and the last the party saw was the rake whirling over the horse's back.

The entire journey was remarkably free from mishaps, and there were none that were serious. Of laughable incidents there were sufficient, as might be expected in a tour occupying a number of days. None was more laughable than one which befell Mr.

Schmidt just before reaching Portsmouth, N. H., where the arrival was made after dark, as the departure from Boston was made in the afternoon. The automobilists were uncertain in regard to the direction, and, seeing a pole with a sign on the top, Mr. Schmidt got out and climbed to the top of the pole. It was very dark, and nothing could be seen except by the aid of the electric flashlight, but they soon heard an unusual sound in the direction of the guide-board. Mr. Schmidt appeared a moment later and quietly asked Mr. Dill for the loan of his long rubber coat. He explained that when he got to the top of the pole his trousers caught on a spike and he fell off, leaving the trousers hanging in the air. The only thing at the top of the pole, he added, was an advertisement for somebody's soap.

Another amusing incident occurred during the ascent through the Flume to the Profile House. A stage loaded with passengers was coming down, and the driver was so scared at the sight of the automobiles that he jumped from his seat and ran off. The passengers, most of them girls, were frightened also, and one jumped from the vehicle into a ditch, but escaped unhurt. The horses betrayed no fear at all.

Mr. Dill refused a flattering offer at one point of his journey through New-Hampshire, where the party happened upon a travelling circus company. The manager offered him \$25 if he would ride twice around the ring in his automobile. When that offer and a second one of \$30 were both declined the showman was amazed, and exclaimed: "Well, you must be a mighty rich cuss to refuse that!"

### Sixteen Days on Indiana Roads.

Among long distance tourists who have made successful trips this season, Richmond, Ind., is represented by J. A. Spekenheier, who, with his wife and Mr. and Mrs. Carman, of Indianapolis, completed a six-hundred-mile tour of Indiana on July 28, having been out just sixteen days. Stops were made at interesting points, and some sandy roads and stiff hills were gone over, so that the relation of distance travelled to the period consumed tells of endurance rather than speed. Fast time was made, however, on favorable bits of road.

### New Yorkers Drive to Chicago.

Professor Leonide Keating and Mrs. Keating, J. McFarland and Mrs. Cord, all of New York, visited Chicago last week, and left for New York in their Winton touring car. The party came West in the car, which was formerly used for racing, but remodelled into a touring car.

### Windy City Motorists Plan Trip.

Three well known Chicago motorists, Charles Gray, Ned Heath and Charles Tucker, are planning a trip to New York, Providence, Boston and Block Island. If the trip takes place it will be made early in September.



## AUTO PATROL WAGON

**Is Wanted by Philadelphia Authorities and may be Purchased by Them.**

As auxiliary to other facilities of the Philadelphia Police Department, Director Smyth favors the automobile for certain kinds of work, and he is considering the matter of placing one in service as an experiment. He says concerning this matter:

"I am a believer in the efficiency of automobile police patrols. The Police Department of Atlantic City seems to get excellent service from its automobiles in use there. The ease with which the automobile runs, I think, would be of considerable consequence in hauling the wounded from a fire or a riot. The question of economy in relation to horse feed and 'keep,' of course, enters into the calculation. Nearly all the patrol wagons now in service are in excellent condition.

"I am opposed to adopting automobiles for the police to take the place of either the bicycle or the horse. The Police Department in Boston has policemen dressed in plain clothes speeding around in automobiles to arrest automobile scorchers. The law has limited the speed here to such a moderate pace that the 'automobile cop' is not needed. The mounted police can patrol our suburbs much better than it could be done in automobiles. An automobile cannot jump a fence in pursuit of a fleeing burglar. Neither can it make much progress in such a quest in a stony suburban lane. It takes a man and a horse for work like that."

## Van Valkenburg's Patent Roadway.

A roadway for automobiles has been patented by R. T. Van Valkenburg, of Laporte, Ind., and it is so well thought of by capitalists that a company has been formed, with ample backing, to operate a line from Toledo to Cleveland, with an eventual extension to Chicago. A line of passenger automobiles will be operated by the company, and private vehicles will be permitted on the roadway upon payment of toll.

The roadway, twenty-one feet wide and ingeniously drained, is to be made entirely of cement laid for the accommodation of heavy vehicles at the outer sides and lighter and faster ones in the centre. The wheels run in grooves, with an appliance permitting one to turn out at any time into the other track running in the same direction. The cost of construction will be low, of maintenance almost nothing and of operating comparatively slight. Expert engineers pronounce the project entirely feasible.

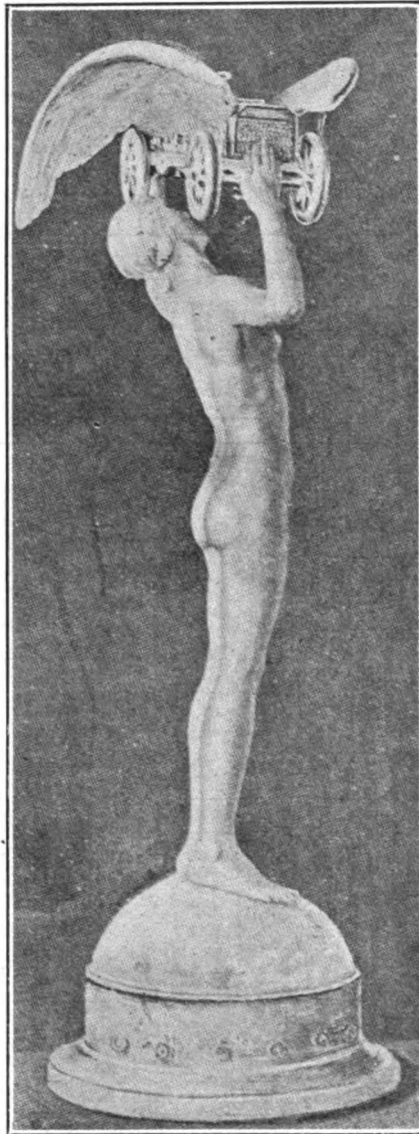
## Plunged Into the Clyde.

A Scottish motorist recently had a narrow escape. His car was being driven down a very steep descent to the steam ferry which crosses the Clyde, when the brakes failed, and, running away, the car crashed through the barrier, crossed the deck of the vessel and plunged into the river at the other side.

No one was hurt, and the three occupants, one of whom could not swim, were safely fished out. The car was recovered on the following day.

## Trophy Won by Frenchmen.

The Montague trophy, offered by John Scott Montague for the best team showing in the Bennett Cup race, now reposes in the hands of the Frenchmen who competed in that event, they being the only team to finish the race. The trophy is an extremely



striking one, as will be seen from the reproduction here shown. It is also noteworthy as being the only trophy—outside of the Bennett Cup itself—emblematic of the automobile offered at the Irish meeting. The well poised female figure holds aloft an up-to-date automobile, typifying—both in itself and through its added wings—the modern conception of speed.

## Like American Car "Principles."

The complaint comes through British sources from South Africa that American automobiles are too light to find favor there. The "principles" of the cars are admitted to be excellent, and if they were more substantial a large sale would, it is said, result.

## AN OPPORTUNITY LOST

**Sorrow Felt That New Jersey Fee was not Made \$5 Instead of \$1.**

On the theory that all motorists have money, sorrow is being expressed in New Jersey that the licensing fee was not made \$5, instead of \$1, in order that the additional amount might be devoted to the road building fund.

Expecting a registration of not more than fifteen hundred cars at the most, and getting thirty-four hundred within four months, the Secretary of State calls attention to the fact that the fee might just as well have been made \$5, and a good sum of money raised to further the State's work of building good roads. This would have added to the comfort and satisfaction of the automobile drivers, and would have also tended to pacify the farmers of the State and decrease their objection to the horseless machines. New Jersey spends a quarter of a million dollars annually upon her roads, and even with that expenditure there remains much to be desired on the highways in many parts of the State.

Had the automobile license fee been \$5, \$4 of it could have gone for good roads. This would have meant at least \$16,000 this year for this purpose. As it is, the \$1 fee just covers the clerical expense attached to the department.

## Milbank's Promised Parade.

Some time during the month of October next the people of Albany, N. Y., are to be favored with one of the biggest automobile displays ever organized in the form of a parade. Such is the promise made by the local owners of automobiles, who are responding unanimously and enthusiastically in favor of the proposition, which originated with Dr. William E. Milbank. The parade will be the first one held in Albany.

## Autos in Arkansas.

An automobile census has been taken in Arkansas, which shows there are fifty cars owned and operated in the State. Little Rock leads with fifteen, and Hot Springs is a close second with twelve. Texarkana and Pine Bluff are tied with six each. The number is increasing so rapidly that it is thought there will be close to one hundred cars in use by the first of the year.

## Two Whites on Tour.

C. G. White, son of T. H. White, of Cleveland, is touring New England in an automobile. He left Albany, N. Y., and drove through the Connecticut Valley. He will follow the New England Coast as far as Bar Harbor. Letters received from him from Connecticut stated that he is having a successful trip, devoid of any accidents.

The New York State Fair track at Syracuse is being banked and repaired preparatory to the automobile races to be held there during the week of September 6.

### Whipple to Erect Modern Establishment.

R. W. Whipple, the enterprising Binghamton, N. Y., dealer, is preparing to erect a combined garage and salesroom that will be one of the largest and most complete in the country. He has purchased the property at No. 221 and 223 Washington-st., extending through to Water-st., and having an area of 60x250 feet. Here he will erect a building having two stories on Washington-st. and three on Water-st. The building, while facing both streets and with entrances from both streets, will properly front on Washington-st. At this end will be a large show room, containing a carefully selected exhibit of the standard makes of machines which Whipple handles. The private offices and business offices will also front on Washington-st., adjoining the show room. Large plate glass windows will make one of the most attractive show rooms in the city. The remainder of the ground floor will be devoted to the storage of cars. Side entrances will afford access to the garage from both streets, obviating the passage of cars through the show rooms. The floor of the repository will be cemented.

The second floor of the Washington-st. front will open upon the street with display windows, the same as those used on the first floor. The front half of this floor will be used as a show room while the rear half will be equipped as a repair shop.

The position of the building permits of large windows being placed on every side, and the light will be further augmented by a large skylight running through the centre of the building. A stock room of ample size will be located on the second floor.

There will be two separate power plants, each equipped with heavy lathes, drill presses, power saws, a complete forging plant, a complete brazing establishment, emory wheels, in fact everything essential for working both metal and wood. No expense is being spared for an equipment of the best line of bench tools that money can procure.

A two-ton elevator of standard make will give access to the different floors, and will be capable of handling the largest cars. The building will be of brick, and will be strictly fireproof throughout.

### A Go-Ahead Wood Working Concern.

That they have just completed a Winton order for eight hundred tonneaus, front seats and mud guards, should be sufficient to favorably commend to notice the American Veneer Co., of Jersey City, N. J. That they are about to add some twenty-five thousand feet of floor space to their facilities and are figuring with a number of important motor car makers for their 1904 wants, are additional items of significant interest. The Veneer Co. know "what's what" in high grade wood working, and there is nothing in the form of bodies or other woodwork that they are not in a position to supply.

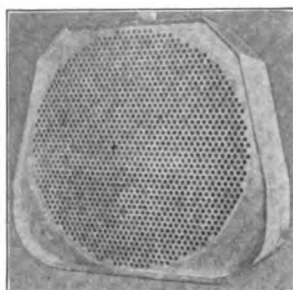
An automobile store will be opened at Port Huron, Mich., by Marshall N. Buckenridge.

### White's New Coast Garage.

The new garage of the White Sewing Machine Co. at San Francisco, Cal., is almost ready for occupancy. It is one of the finest establishments in the West, having a frontage of 125 feet on Franklin street, 60 feet on Market street and 60 feet on Page street. The equipment is most complete, and the arrangement of the various departments is wholly admirable. Six thousand dollars' worth of tools have been installed, and the facilities for doing repair work of all kinds will, in consequence, be of an exceptional character.

### Kells' Metal Specialties Make a Hit.

One who has felt the increased and increasing popularity of the tubular or "honeycomb" radiator is W. J. Kells, No. 130 Highland avenue, Jersey City, N. J. Quick to grasp its merits when it made its appearance on "the



other side," he engaged in its manufacture, the first Kells radiator being shown on the Moyea car at the automobile show in January last. Since then he has not lacked orders, the best proof that his cooler is giving satisfaction. He is also producing hoods, water tanks and mud guards, and is in position to quote interesting figures on such goods.

### Huber of Detroit Incorporates.

The Huber Automobile Co., Detroit, Mich., has filed articles of incorporation, giving its capital as \$100,000, with \$80,200 paid in. Of this only \$200 is cash, the remainder representing certain personal property formerly owned by the copartnership firm doing business under the name of the Ide-Sprung-Huber Automobile Co., consisting of mechanical devices and certain inventions made by Emil Huber.

### Will Make the Lansden Car.

After working along quietly for more than a year, the Birmingham Electric & Mfg. Co., of Birmingham, Ala., are about ready to produce in quantities and market the Lansden car. Two of these vehicles are now approaching completion, and they will be used as demonstration cars.

### Company for Ft. Wayne.

There is a strong probability that a company to manufacture automobiles will be formed at Fort Wayne, Ind. G. P. Dudenhoefer and H. E. Bueker, of the City Carriage Works, and Harry Meyer, of the Meyer Cycle Company, are the ones most interested.

### Brooklyn's Finely Equipped Garage.

An ancient Brooklyn landmark, the old brick church at Ormond Place, near Jefferson avenue, is undergoing a transformation. It has been leased by the Ormond Automobile Co., and is being remodelled into an up-to-date and finely equipped automobile garage. The church was built in 1843, and was for many years known as the Central Congregational Church. It then became the worshipping place for an Episcopalian congregation, and during the last days of its career as a house of worship was occupied by a colored congregation.

The work of remodelling the edifice was started on July 12, and it is expected that it will be ready for business this week, and that before the middle of August it will be completed and contain a full electric equipment. The Ormond Automobile Co. has perfected plans to give Brooklyn one of the finest establishments of the kind to be found, and the building will contain many novel features. The floor space which will be utilized amounts to about 8,000 square feet, affording room for 150 cars. The main entrance will be located on the Ormond Place side, and the entrance to the company's office and reception room will be at the corner of Jefferson avenue.

A ladies' reception room will be elegantly fitted up, while twenty-five lockers for ladies and one hundred for men will be put in. An electric charging plant, capable of charging six vehicles at a time, is being installed.

Surmounting the old belfry will be an immense electrical sign containing 150 lights, and a large portion of Brooklyn's population will be able to see it at a considerable distance. Another electrical sign will be displayed at Jefferson and Bedford avenues, and it will be large enough to attract attention on the latter thoroughfare from Flushing avenue to the Boulevard. Altogether the establishment will be a welcome addition to Brooklyn's garages.

The incorporators of the Ormond Co. are well known in Brooklyn real estate circles. The officers are Wilfred Burr, president; H. A. Lyons, secretary, and R. W. Haff, treasurer.

### Auto for Detroit Park Board.

Park Commissioner Bolger, of Detroit, Mich., is a proud and happy man. The Detroit City Council recently authorized him to purchase an automobile, to be used by his department in covering the large territory in its charge. He selected a Cadillac with tonneau body, and has already become expert in its management. A ride about Belle Isle and the length of the Boulevard, with a side trip to Palmer Park, is anything but a pleasure jaunt when performed daily with a horse and wagon, in addition to the other work of the department, and the saving of time effected by the automobile has proved a boon to Commissioner Bolger and Superintendent Healy, who are enabled to cover several times the territory in the course of a day that they formerly could.

## RUSTIC FRIGHT A FAKE

**Country Horses Less Afraid of Automobiles Than Their Owners Pretend to Be.**

Manchester, N. H., has an automobile club, but the rural folks in the Granite State have yet to overcome their prejudice against the automobile. Some amusing stories come from Manchester illustrative of this fact.

Two motorists from Manchester had a queer experience near Lake Winnisquam when returning from The Weirs not long ago. They were hailed so vociferously and persistently from a house which they passed that they stopped, turned and ran back to the place. There a man met them and informed them that "a man and a woman with a very skittish horse are down that road and if you go down it you will scare the horse and they will be seriously hurt if not killed." This was said to them as if the information would settle the entire matter and they would beat a retreat.

"We believed that we had as good a right on the road as any horseman," said one of them in telling about the occurrence, "so we continued on our way. A detour would have taken us quite a number of miles out of our course. The man seemed very angry because we would not turn and go back the way we had come.

"A mile or two down the road," he continued, "we met a man and woman driving a horse answering the description given us. The man, as soon as he saw us, began to whip his horse and acted as if he expected it to do all kinds of stunts. He finally jumped out and took it by the head. We slowed up and passed by at almost a snail's pace, and the horse, instead of rearing up on its hind feet, gazed quietly at us as if really interested and did not seem a bit afraid.

"I am strongly inclined to believe that drivers in general are far more afraid of automobiles than horses are," continued the narrator. "And I firmly believe that more harm is done by reckless use of the whip when an automobile comes along than would come about if the horse were let alone, even if it were frightened."

Another Manchester man, making a Sunday run recently in the direction of Londonderry, met a baker's cart in the road. The driver jerked on the reins and proceeded to lash his horse, and the animal kicked so badly that the contents of the cart were spilled in the roadway.

"If the fellow had let his horse alone," said the motorist, "I think we could have passed him safely without any trouble."

A little further along the same automobile came in sight of a young woman driving alone. She at once jumped out, took her horse by the head and led him to the side of the road. The motorist stopped and then slowly started to pass, keeping a close watch on the horse, so that he might stop and as-

sist the girl in case of trouble. The horse calmly surveyed the car as if he had been used to seeing such things all his life.

"I did just what father told me to do if I ever met an automobile," said the young woman to the motor car driver, "but I shall never do it again. I believe that father is more afraid of automobiles than any of the horses," she added.

The experience of still another Manchester man was equally amusing. He recently stopped at the "hotel" in a small country town not more than a dozen miles out of the city, and asked for a bucket of water to put into his cooler. He was met with a flat refusal from the proprietor, who told him in language more forceful than elegant that he could have nothing for his "d-d devil wagon."

## HODGSON'S SPEED INDICATOR

**Tells Rate of Travel in Big Figures—Will have "Tell-Tale" Hand.**

An exceedingly ingenious device is the Hodgson automobile speed indicator, referred to in these columns two weeks ago, and which the Speed Indicator Co., of Minneapolis, Minn., is placing on the market. One of its most striking features, as the illustration shows, is its conspicuousness. It is intended to be read by pedestrians on either side of the street, so that they can tell by merely glancing at it whether the vehicle to which it is attached is exceeding the legal speed limit.



**A Coney Island Auto.**

One of the big amusement resorts at Coney Island makes use of a fake automobile as an advertising device, and it attracts considerable attention as it passes up and down Surf avenue. An ordinary four-wheeled carriage has been fitted up to bear a distant—very distant—resemblance to an automobile. The steering gear is operated by a wheel from some other carriage, a common lantern swings in front of the dashboard, and a small bell is kept ringing by one of the occupants, while the "chauffeur" guides the vehicle along the road. The "motor" is a horse harnessed in the shafts, which have been transferred to the rear of the carriage, and the animal pushes instead of pulls.

### Dayton Club Incorporates.

The Dayton Automobile Club, of Dayton, Ohio, was incorporated on July 28, with C. B. Wolf, W. W. Eusey, A. F. Bowman and others as incorporators. This step has been taken with the expectation of progressive and expansive movement on the part of the organization.

The indicator is preferably attached to the front axle, although it can be fastened to the rear one or to the body of the carriage. The dials can be made in any size and the case in any finish. Its purpose is to accurately record the momentary speed of the automobile to which it is attached and while this is done by the present instrument, it is the intention of the makers to provide a "tell tale" hand which will continue to show for fifteen or twenty seconds the rate of speed at the time of sudden stoppage. The dials will also contain the registered number of the vehicle, so that the on-looker can locate it at the same time any violation of speed is noticed.

### Nine Hundred Miles in Nine Days.

F. E. Dicklason and J. H. Howard arrived in Cleveland last week, after an automobile trip of nine hundred miles in less than nine days. They started from Minneapolis to go to Buffalo, where they intend to return to Chicago by boat. A Winton touring car was used on the trip.

## BOSTON'S AUTO 'BUSSES

### Success of Experimental Line Promises Important Extension of Routes in the City.

Boston expects a revival within two months of a line of automobile omnibuses from the Back Bay section to the downtown district. The scheme as at present planned is to have the carriages start on Bay State Road, near the Cottage Farm station, and come into Boston over Bay State Road, Beacon street, Arlington street, Boylston street and Tremont street to Temple Place, where the vehicles will make the square formed by Washington, Winter and Tremont streets, and will then continue back. The automobiles which will be used will be driven by gasoline, will seat twelve persons, and will stop wherever passengers desire. The fare will be moderate, and it is the intention of the promoters to continue the service throughout the year. During the evening the 'busses will be run to the theatres, and will be in waiting when the performances are ended.

The idea of running 'busses in Boston has gained confidence by the success which the scheme is meeting in Chicago. As an experiment to test its practicability in Boston a line has recently been put into operation in Brookline, and is meeting with considerable success. While being at first considered largely as a means for sightseeing and amusement, the line is beginning to be used for business purposes in connection with the streetcars, and it is on this patronage that the line bases its continuance. At present three gasoline carriages, seating twelve each, are being operated, but it is expected that within six weeks this number will be increased to seven.

The 'busses start on the hour in the morning, but are increased to a half-hour schedule in the afternoon. With the additional automobiles which are now awaited, it is expected to extend the trip by continuing the route around the reservoir. Then the vehicle will run on twenty minute time. If the line is patronized sufficiently by people going to and from business, these automobiles will also be kept in operation throughout the winter, and Brookline will have an all-the-year automobile service.

### Bull Came out Victor.

The bull was the victor in an impromptu fight with an automobile on a country road near West Kortright, N. Y., last Saturday. The bull was owned by Frank Webley, a farmer, who was leading the animal from a pasture. Melvin Thomas and two of his friends were in the automobile, which is painted red.

When the bull espied the automobile he bellowed with rage. The automobilists responded with laughter and a toot of the horn. Farmer Webley gripped the halter with both hands, dug his heels into the earth

and prepared for trouble. There was plenty of it soon.

Webley's efforts to hold the bull, which was lashing his tail, pawing the earth and shaking his horns in a frenzy of rage, were soon over. The chauffeur, to facilitate the sport, turned on power to the limit. Up the hill tore the automobile, and, just as it reached the crest, away tore the bull.

Out of a cloud of dust there first emerged a kaleidoscopic sound—the beating of hoofs, a whirr, shouts, bellowing and a crash. The automobile came last, and it was going on a tangent. Struck head foremost by the bull, it was tossed into a ditch and the automobilists were pitched in a heap into a sand-bank. They were bruised and terrified, but managed to scramble out of danger.

The bull thought he had tossed the machine into the next township, and started down the hill after it, with the shouting farmer a badly distanced second. The machine was out of commission. A section of the steering gear adorned the bull's horns in lieu of a victor's wreath of laurel. Mr. Thomas and a friend sought the services of a physician, and found they had sustained no serious injury.

### Chicago's Centennial Celebration.

Automobilists are to assist Chicago in celebrating her centennial jubilee, which is to be observed during the week September 26 to October 1. If the meet is not the greatest ever held, Chicago will be disappointed. Among the famous chauffeurs who are to be there are Barney Oldfield, Tom Cooper and others. Big racers will contend in a series of events, and there will be every encouragement for the making of new world's records.

An evening automobile parade, with two thousand illuminated cars in line, three abreast, will be one of the pageants. The great number of vehicles, including some of the finest in the world, is expected to make a blazing procession along the boulevards. Vehicles are promised by clubs in Cleveland, St. Louis, Toledo, Milwaukee, Indianapolis and other cities. Prizes will be given for the best illuminated tournouts.

### How he Got the Money.

Julian Vernon, son of a wealthy Parisian, had become deeply affected by the automobile mania, declares a veracious Paris correspondent. As his father refused to advance him money to buy an automobile, he broke open his safe one day with dynamite and took out some 9,000 francs, with which he bought a brand new automobile and disappeared in it from Paris.

He has been seen in various provincial towns, but at present the police do not know his whereabouts. He is only eighteen years of age, and is accompanied by several young lads, who, it is supposed, had suggested the escapade.

Surrogate Daniel Noble, of Queens County, has joined the growing army of automobilists, and has purchased a handsome car, which he is using to enliven his summer vacation.

## ARCTIC TOURISTS START

### Departure of the Glidden Automobile Party From Copenhagen for the Far North.

Amid cheers and cheering wishes from friends, Mr. and Mrs. Charles Glidden, of Lowell, Mass., left Copenhagen, Denmark, on the afternoon of July 29, in the powerful automobile with which they will attempt to cross the Arctic Circle. Their journey will take them through some of the wildest mountain scenery of Northern Norway.

From Christiania the tourists will have to traverse more than one thousand miles of rough country. The automobile passes through Bergen on its way to Trondhjem, and from that point the course will be generally north-northeast for 125 miles, to reach the coveted point north of the Arctic Circle.

The Gliddens are well prepared for the northern latitudes. The automobile carries stores of blankets and heavy wraps. There are also eatables, so that if the car becomes disabled at any lonely spot on the route they need not go hungry. In that case a camp will be established. Every precaution has been taken against a breakdown. The automobile is supplied with extra tires and with tools to repair breaks in the machinery.

The Gliddens also have with them maps, guidebooks, compasses, a fine chronometer and a sextant. To cross the Arctic Circle they will need to cross the sixty-sixth parallel of latitude, and it is believed that the tourists will make Beleren their stopping place when they cross the circle. Beleren is close to the sixty-seventh parallel, and is half a degree north of the circle.

### Congressman "Tim" a Motorist.

Congressman "Tim" Sullivan, of New-York City, and more specifically of the Bowery, has long been a patron of the automobile, hiring one whenever he has had occasion to ride. He is now the owner of a car, which is pronounced the warmest thing on the Bowery. It is supposed to have come to him as a birthday present last week. While not large, it is a saucy looking one, and Tim's constituents admire it. When Croker was leader in Tammany Sullivan was known at times to arrive at the Fourteenth street Wigwam in a hired automobile, and Croker suggested to him that the Bowery might not like it. Tim declared that he knew better, however, and the fact that the birthday good will of his constituents was expressed in the form of a motor vehicle shows that he was right.

### New Jersey Gets the Fees.

The registration of automobiles in New Jersey shows that the greater number of them are owned by New York, New Jersey and Philadelphia parties; New England is also well represented among the owners of 3,400 machines already booked, but no application has been received for license for any owner south of Wilmington, Del.

## ELECTRICS' FINE SHOWING

### Confronted With Questions, Dealers go Into Matter of Costs—Some Figures.

The item of operating cost is one not usually laid much stress upon in considering the field of the electric vehicle. In fact, the popular belief is that it is greater than in the case of gasoline cars, if not of steam cars as well. At the same time, dealers are being more and more persistently confronted with such questions as "How much does it cost to run?" or "Is it more expensive than other vehicles?" the inference being that much depends on the answer. In self-defence some of them have been meeting such queries by a comparison of costs, and although they approached the matter with considerable trepidation at first, a study of the subject has emboldened them, until now some of them even welcome the formerly dreaded catechism.

"Yes, perhaps three out of four persons ask us about comparative costs," said one dealer in reply to the Motor World man's question, "and, while we never invite such a comparison, and, indeed, prefer not to draw it, we are becoming less and less indisposed to shrink from it.

"Now, take my own case. I keep a two passenger runabout at my home regularly, and all the charging is done in the town. My bill for current uses during the last two months was just \$6.15. I remember the exact amount as I just had a check drawn for it to-day. During that time the vehicle was run a little over four hundred miles—mostly for demonstrating purposes, and including a number of runs between the office here and my home. That figures out, you see, at 1½ cents per mile—or perhaps a little less, for while I haven't the exact cyclometer figures with me, I am pretty sure it was quite a little over four hundred miles. That cost for current corresponds to the gasoline driver's gasoline, lubricating oil, batteries for ignition, etc., and, so far, the comparison is entirely in my favor, for you will not find many gasoline cars averaging as low as 1½ cents a mile for operating expenses.

"There is one other item that I have to include in my reckoning—that is the cost of battery maintenance. That varies enormously. The number of cells, the distance driven, the care given the batteries—these and many more important matters enter into the calculation. But to get it down to a fair or average figure, a well cared for battery should be good for five or six thousand miles before a renewal of the positive plates becomes necessary. The latter would entail a cost of about \$75 or \$100. Some concerns charge as high as \$150, but this is excessive, except where the battery is in very bad condition; our charges, as our books will show, run from \$60 to \$125, and the figures first mentioned can be relied upon as covering most cases. Now, taking the lowest mileage estimate, five thousand miles, at \$100, you

will see that the cost per mile is two cents; or, at \$75, which is really a more probable figure, it comes out at 1½ cents a mile.

"Against this we have the cost of keeping the gasoline engine in order, and, unless the owner of a car of this kind has a strong mechanical bent, and is willing as well as able to do the work himself, I feel quite sure his repair bills will cost him much.

"Besides, what a minor matter operating cost is, after all. The motorist who goes out for a little drive of an afternoon or evening, covering, say, twenty or twenty-five miles, cares very little whether it costs him two or three cents a mile. Or, if he takes an all day run, and drives one hundred miles, what is \$2 or \$3 to him in comparison with the genuine enjoyment he gets out of it."

### Cause of "Fierce" Clutches.

Some drivers are troubled by having a too fierce clutch on their car. This is in its way as bad as a slipping clutch, if not worse, as unless the clutch can be put in gently and the car moved off gradually, great strains will be thrown on both the engine and the gear, which in a short time will begin to show the effects of such treatment in very marked manner. A fierce clutch may be due, and chiefly is due, to one of two causes. First, too strong a spring, and consequently too fierce a grip between the male and female portions of the clutch. Again, there is a third reason which occurs with some cars, and that is a badly designed clutch. By this is meant a clutch in which the conical angle is too acute, so that a sudden and big wedging action occurs when the one half of the clutch is put into engagement with the other. In the latter case there is no real remedy, except an entirely new clutch. The remedy of the first named cause is very obvious, but when slackening off the spring one should be very careful not to get it too slack, but by trial and error adjust it to the greatest nicety. It is even permissible to allow the clutch to slip very slightly when ascending hills on the lowest speeds, as this enables the engine to maintain its momentum. In the second place a dressing of oil will cure fierceness.

### Coolley is Careful.

No more careful driver than L. D. Coolley is to be found in Kalamazoo, Mich. He is provident, too. Wherever he goes he carries a list of automobile decisions in his pocket ready to flash at any local Dogberry who may be imbued with the idea that the automobile is not entitled to the full rights of the road. "If an automobile frightens a horse and causes it to run away the owner is in no way responsible for damages, if running within the reasonable provisions of the law and he is driving on the right side of the highway," he contends.

### Mansfield's Old Home Week.

In the "Old Home Week" celebration this year, Mansfield, Mass., vied with other New-England towns, and the culminating feature of its successful run of festivities was an automobile procession in the afternoon of July 29, the closing day.

## LOOK TO THE LUBRICATING

### Importance of This Matter and How it is Frequently Neglected.

There are one or two points upon which even experienced motorists show extraordinary carelessness. Perhaps the most usual of these is the question of lubrication. A certain motorist rarely, if ever, changed the oil in his base chamber, and had not the least idea as to how much constituted a full charge. His system was to keep on replacing the oil through the lubricators until the presence of smoke proclaimed an excess. Such a system is wrong. The oil in the base chamber requires changing regularly, and the foul deposit which collects should be washed out with gasoline or kerosene. Needless to say, the engine should not be run for this purpose, but after inserting a pint of kerosene the starting handle should be turned briskly a few times, and then the plug opened at the bottom of the base chamber and the foul mixture let run off.

As regards the quantity of oil required, it varies in different engines, and if the makers who supplied the car did not give the necessary information, the owner should seek to arrive at the quantity by experiment. He might safely start with half a pint, and run the engine for two or three minutes. If it does not smoke he might add a small measured quantity extra, and then run the engine again. The process should be continued until smoke is produced at the exhaust. The correct amount will then be in or about the total amount poured into the base chamber prior to the latest addition which caused the smoke.

As regards the gear case, too, a certain amount of attention is most necessary. In the first place the quality of the oil should be right. If it is too thick it tends to hold in suspension the tiny particles of metal which are detached through wear, and these form a regular grinding mixture. If it is too thin the body may not be sufficient to supply proper lubrication, and the noise of the gears will also be increased. The owner should seek to arrive at the happy medium. Not content with this precaution, he should not run the oil in the gear case for more than one hundred miles, for by this time there will be a considerable deposit of minute particles of metal, which are bound to get mixed up with the oil and cause damage. If he wishes to economize, it is good practice to run the oil off every one hundred miles and leave it in a vessel. The particles of metal which are in suspension will then sink to the bottom, and in a few days the oil may be drawn off and used again.

### Find Foreign Buyers.

Less than 5 per cent of the Mercedes cars go into the hands of German motorists. Foreign buyers take almost the entire output, which, by the way, is small, amounting to less than three hundred cars a year.



### Saratoga's Impromptu Parade.

An automobile parade "happened" in Saratoga on Sunday afternoon. It was said to have been unplanned, and even unpremeditated. "Happened" is, therefore, the right word. Twenty-nine automobiles participated, gathering in front of the United States Hotel about 2 o'clock. After a short parade through streets of the village, there was a run into the country, a scattering into various roads there, and a promiscuous return, which happened to bring most of the vehicles into Broadway about the same time in the evening.

In the parade were E. R. Thomas, with Mrs. Thomas and friends, in a 45 horsepower Mercedes; a party invited by Mr. Thomas in a motor car; Mr. and Mrs. Harry Payne Whitney and friends, 45 horsepower Mercedes; Julius Fleischmann and friends, Peerless; G. H. McFadden, Panhard; Isidor Wormser, Panhard; Mr. Herschfield, in a C. G. & V.; A. C. Bostwick, Mercedes; Stuart H. Elliott, 20 horsepower Winton; John A. Drake, 32 horsepower Mercedes; Henry Black, 24 horsepower Panhard; Charles Gates, 45 horsepower Mercedes; Dr. J. G. Lyman, Mercedes; W. W. Keith, 45 horsepower Apperson; William J. Mackin, 16 horsepower Mercedes; John J. Ryan, 40 horsepower De Dietrich; Walter Camp, Autocar; A. W. Brown, Autocar; Daniel Lawton, Oldsmobile; A. B. Proal, Mercedes; A. E. Reynolds, Northern; S. C. Mallard, steam vehicle; Miss M. J. Smith, Oldsmobile; Miss Madeline Colfax, Oldsmobile; W. D. Ellis, Northern; Dr. Cochran, Apperson; W. R. Robertson, Rambler; Edward Murphy, 3d, Franklin, and Arthur Redfern, 12 horsepower Darracq.

### Bay State Requirements.

The Massachusetts Highway Commission is kept busy these days by the additional work of replying to and supplying applicants with registration papers. So far, about 325 motorists have applied for such papers, and as many more for a license to operate either an automobile or a motorcycle. Over 500 have written for copies of the blank application papers, with the intention of registering.

Many have so far misunderstood the required registering fee, thus causing a delay in obtaining their certificates. The owner of the automobile must register, at a cost of \$2, and the person who is to drive the machine, whether it be the chauffeur, a member of the owner's family or the owner himself, must have an individual registration certificate. The number plates will not be ready for at least ten days, and will have to be sent by express at quite an expense to the State.

### Licenses in St. Paul.

The new Minnesota law requiring the registration and licensing of automobiles has revealed that the number of such vehicles now in use in St. Paul is considerably over one hundred. Licenses for 114 cars have already been issued. It is thought so rapidly are the self-propelled vehicles being purchased that the number will reach two hundred before the year is out.

### After Gasolene Users.

Aimed especially at automobilists, a campaign against persons storing gasolene or other similar materials in large quantities contrary to the provisions of an ordinance recently passed by the Common Council has been started at Milwaukee, Wis.

During the last week the captains of the Police Department have been making the rounds of all places where gasolene and such materials were stored, and have made a report to the chief of all such places. Copies of a circular containing the provisions of the ordinance are being mailed to the owners of the materials, and another inspection will be made in the near future to see if the law has been complied with.

According to the law, gasolene cannot be kept on hand in larger quantities than five gallons, unless in specially constructed buildings.

Such buildings must be at least one hundred feet away from any other building, and must be constructed as follows:

The walls shall not be less than sixteen inches thick, nor more than sixteen feet high; the floors shall be made of fireproof paving or concrete upon the ground, which shall be at least five feet below the street grade; the roofs shall be of metal and have fire walls extending eighteen inches high, all around, no less than twelve inches thick, and have copings of incombustible material, subject to the approval of the inspector.

"The use of the automobile has increased the danger from these materials," declared the chief of police. "We find that many owners are storing barrels of this material in sheds, barns and other places, and that grocers and other dealers are keeping large quantities for the accommodation of automobile owners. More machines are being used each day, and we must begin to enforce this law before the material is stored, without discrimination all over the city."

### Nebraskans Like Autos.

A year ago the automobiles owned in Omaha, Neb., could have been counted on the fingers of one hand. Now there are nearly forty in the city, while every little outlying hamlet boasts of one or more, and the buying goes on at a rate that promises to double or even triple the number before the year is out.

Quite the most remarkable development, however, is the sale of cars to small towns. One local firm has sent in twelve months six gasolene vehicles to Fremont, four to Dawson, and others to Sutton, McCook, Stromsburg, Plattsmouth, Lincoln and many other points. Their Lemars, Iowa, agency has sold in a year thirty-two machines, less than one-fourth of these going to towns with paved streets.

### Bloomington's 'Bus Line.

An automobile 'bus line to run from Decatur to Bloomington, Ill., is projected. It is proposed to form a stock company for this purpose.

### The Pneumatic Cushion.

Motorists who suffer from excessive mental and physical fatigue after long runs—and many do—use air cushions to act as buffers between themselves and the vibration of their cars, according to a transatlantic authority.

But air cushions are apt to slip and wobble from side to side. Permanent pneumatic cushioning has consequently come into favor. Back, sides and seats are now being made "pneumatic," and are upholstered in an outer cover of leather, corduroy velvet or whatever the car owner may elect. No buttons are allowed to interfere with the delightful comfort of the pneumatic seats. Inner stays keep the contour of the cushions in perfect shape after inflation, and it is a very simple matter to pump them up to the acme of ease and soft sitting.

Such a system is invaluable to motorists of nervous temperament. A long run induces headache and sleeplessness in some persons. Probably the vibration of the car and its consequent jarring of the spine, added to the recognized nerve stimulation of motoring, is answerable for the symptoms of exhaustion and mental fatigue which an unusually long run produces in some enthusiastic automobilists.

Pneumatic cushioning solves the problem. Vibration and "jarring" are banished. Comfort, ease and an ideal smoothness in running are the result of applying to the seats the principle that has been found so comfortable on the tires.

### Expansion and Contraction.

Some motorists have experienced trouble in starting their engines after they have been run for a time and then stopped for a few minutes. The probable solution of this is to be found in unequal expansion and contraction at the inlet valve—that is, when the engine is cool the stem of the inlet valve is an easy sliding fit in its guide. As the temperature increases with the running of the engine, so the expansion increases almost proportionately between the valve stem and the guide, so that it still continues working. When the engine is stopped and it begins to cool down, the valve guide, being of a different metal from the valve stem, contracts rather more rapidly than the stem, thus causing it to bind sufficiently to hold the valve and prevent it from working for the time being. Of course, when the temperature is still further decreased almost to normal the valve stem will contract sufficiently to release itself, and thus the engine may be easily started.

### Mayor Born is Consistent.

Mayor Born, of Sheboygan, Wis., believes in consistency. The common council of that town has passed an ordinance limiting the speed of automobiles to eight miles an hour. It was passed against the wishes of Mayor Born, who called attention to the inconsistency of the council limiting the speed of automobiles to eight miles an hour while the street cars were allowed to be propelled at the rate of twenty-five miles.

## SOME COOLING MIXTURES

### How Those Used for Freezing Purposes Could be Used to Cool Cylinders.

Freezing mixtures and brine solutions are two entirely different things, though the freezing mixture usually becomes a brine solution after it has melted. A freezing mixture is a solid, and is a mixture of either snow or ice with some salt. The mixture is at the temperature of ice, and therefore below that of the atmosphere of the object to be cooled. The absorption of the heat by the freezing mixture first causes the ice or snow to melt, and to pass from the solid to the liquid state, and in so doing to absorb a certain quantity of heat—142 heat units for each pound of ice or snow melted. Ice is very often used without any addition, and its cooling power is then confined to the quantity of ice present. When the ice or snow is melted, it remains still at the freezing temperature, 32 degrees F., until all is in the liquid state. Where only ice is employed, the temperature now rises, still cooling the surrounding atmosphere, but not to so great an extent—only, in fact, to the extent of the specific heat of water or one heat unit for every rise of one degree of temperature for every pound of water present, says S. F. Walker in the Autocar.

But when other substances are present, those known as being used in freezing mixtures, such as common salt, chloride of calcium, chloride of ammonia, hydrochloric acid and other substances, a further action takes place, which lowers the temperature of the liquid finally formed still more. The ice or snow, having been transformed into the liquid state, is now able to dissolve the salts which are mixed with it. But the act of what we call solution is now known, in the light of the recently developed science of chemical physics, to consist of the transformation of the solid which is dissolved into the liquid state, and for it to be able to accomplish this the necessary heat has to be found from somewhere. In all these cases, as is well known, heat flows from a higher to a lower temperature, and any substance requiring heat to accomplish certain transformations will take it from itself and from surrounding bodies, wherever the conditions necessary are present—that is, wherever a higher temperature exists. Hence the temperature of the solution is lowered by the quantity of heat necessary to convert the solid substance which is mixed with the ice to the liquid state. The heat necessary to transform the solid into a liquid represents a certain number of heat units. These are taken from the general mass of the liquid, and result in a lowering of its general temperature.

It is here that a study of the word which has been so much squabbled about in the engineering papers lately would come in. "Entropy," the term in question, is the quan-

tity factor where heat is the physical agent, the source of energy. The total quantity of energy in the form of heat present in any body is measured by the product of temperature and "entropy." When heat is delivered to a body it may be expended in raising the entropy, in raising the temperature, or partially in both. Similarly, when heat is demanded from a body, the entropy may be lessened, or the temperature, or both. When the ice melts the temperature remains constant; the heat delivered all goes to increase the entropy. When the solid passes into solution it is the temperature which suffers, as the entropy cannot. Hence, the very low temperatures obtained by freezing mixtures—as low as -91 degrees F. Freezing mixtures are used in cold storage work for small services, such as the maintaining the temperature of small cold stores at a certain figure.

One method of making ice is to fill a number of ice cans, of the form the block of ice is to assume, with distilled water and to immerse the cans in a tank which is filled with a brine solution. It is evident that one qualification of the brine solution must be the ability to remain in the liquid state after the water in the ice cans has been all transformed into ice, and hence its freezing point must be below that of pure water. The freezing points of brine solutions vary with the quantity of the salt in solution. Common salt and chloride of calcium are the two solutions commonly employed in refrigerating work, and of the two chloride of calcium is used very much more than common salt. In fact, it is unusual to find common salt used for the purpose now. Taking the freezing point of pure water at 32 degrees F., that of water with 1 per cent of common salt is 31.8 degrees; with 5 per cent, 25.4 degrees; with 10 per cent, 18.6 degrees; with 15 per cent, 12.2 degrees, and so on. One per cent of chloride of calcium reduces the freezing point to 31 degrees F., 5 per cent to 27.5 degrees, 10 per cent to 22 degrees, 15 per cent to 15 degrees, 20 per cent to 5 degrees, and so on.

But where these brine solutions are employed for cooling, another property must be taken into account. As the freezing point goes down, so does the specific heat, though not in the same proportion. Thus, taking the specific heat of pure water as 1, that of water with 1 per cent of common salt is 0.992; with 5 per cent, 0.96; with 10 per cent, 0.892, and with 15 per cent, 0.855. With chloride of calcium a 1 per cent solution has a specific heat of 0.966, a 5 per cent solution 0.864, a 10 per cent solution 0.806, a 15 per cent solution 0.860 and a 20 per cent solution 0.834. This means that, approximately, with a 20 per cent chloride of calcium solution, while the freezing point is lowered to 5 degrees F., or 27 degrees freezing, its ability to carry off heat from the cylinder is reduced by about 15 per cent; or, in other words, if a brine solution is used in order to insure that the cooling liquid shall not freeze, where provision has to be made for approaching these temperatures, an additional quantity of the cooling liquid must be

circulated round the cylinder, other things being the same.

Where large engines have to be cooled, it might be worth manufacturers' while to consider the possibility of cooling from a freezing mixture. Proper precautions would be necessary to prevent the very cold solution from approaching the cylinder, but the presence of a certain quantity of a freezing mixture, if it can be practically applied, should add to the possible mileage of the car.

### An Inalienable Right.

There is one everlasting right of which people cannot be deprived by law or ordinance, and that is the right to kick. It is exercised wisely or unwisely as the case may be, and in some cases with a combination of humor and common sense, as in the case of the automobilist in Akron, Ohio, who lets himself out thus:

"Long ago there was a king who made his subjects reap the harvest of thousands of acres every year without pay, and then made them pay for the wheat they had reaped for nothing. Many were the secret remonstrances, but to no avail. The king was in power, and his will must be obeyed.

"Now there is a Council in Akron that forces the citizens to pay for the paved streets, or else they get none, and after paying for this improvement, they must, furthermore, pay for a license to run their vehicles upon the streets already paid for. Chauffeurs are complaining greatly about such an inconsistent law, but as in the case of the olden time king's subjects, they must pay just the same.

"A law limiting the speed of automobiles, or one demanding two lamps, is very good, but it seems quite strange to force citizens to pay for the privilege of running their automobiles upon the streets, for whose improvements they have been taxed."

### Monterey's Drastic Ordinance.

Monterey County, California, now has an excessively stringent automobile ordinance. The Board of Supervisors recently took the regulation of automobile traffic in hand, with this result:

On a county road the speed must not be greater than fifteen miles per hour. On all mountain roads autos must take the outside of the grade to prevent accidents from frightened animals. The chauffeur must come to a standstill with his machine on the upraising of a hand by any person driving, riding or leading any horse, horses or other beast of burden which shows signs of fright.

On the streets of any unincorporated town in the county the speed shall be no greater than eight miles an hour.

Punishment for a violation of the provisions of the ordinance is imprisonment in the county jail for not exceeding one hundred days or a fine not exceeding \$100, or both such fine and imprisonment.

An ancient French dictionary defines a chauffeur as a "warmer of a forge."

### Lamps and Their Uses.

To the initiated the variety and profusion of lamps carried on an automobile—particularly on a big car—is very perplexing. "Why so many, and so many different kinds?" they ask, and go away only half satisfied with the replies. Many cars have five, or even six, lamps, all resplendent in brass, with big bullseyes and glittering reflectors.

"These three are to give light," said one motorist, to whom the question was put by a friend. He indicated the biggest lamps on the car—one on each side and one in the middle. "They burn acetylene gas, and show the road, no matter how crooked it is or how dark the night. These two," touching two smaller ones affixed to the front of the car just inside the big ones, "are for use if anything goes wrong with the acetylene lamps; they burn ordinary kerosene, and if they don't give as much light, they are handier to use if you want a light in a big hurry or only for a few minutes. This little one at the back of the car is to give warning to those behind us, and to make use of where a portable lamp is required. If we stop any place, or need to look at a signpost or inquire our way or investigate an engine trouble, this little lamp comes in handy. See, it has a bale or handle, and is held in place on the bracket only by this bolt, so that it is only a few seconds' work to detach it."

### Henriod's Novel Gear.

A well known French automobile constructor, Monsieur C. E. Henriod, has recently brought out a new form of transmission gear, in which the gear box is rigid with the differential gear casing on the live rear axle. The changes of speed are effected by sliding spur wheels in and out of mesh with one another in the ordinary way, and not through the agency of friction clutches, as they are in the De Dion cars. The gear box is a portion of the differential casing projecting forward from it. When on the top speed a direct through drive is obtained in much the usual way, and for the lower speeds and for the "reverse," the power is taken through a small lay shaft. The back axle is connected with the frame by radius rods as well as by the side springs. The engine is provided with a main friction clutch, and the power is taken to the gearing through a universally jointed, longitudinal shaft. The brakes, which are of the band type, consist of one on the forward end of the gear shaft, and of a pair fixed to the hubs of the driving wheels.

### Slump in Yacht Market.

It is said that one of the curious effects of the interest in automobiling is a slump in the yacht market in England. There is less selling and chartering than has been the rule in other seasons, and the reason assigned is that people seem just now to prefer automobile touring to the pleasure of sailing over the summer seas. At the same time it is noted as curious that the demand for carriage horses in England is not affected.

### For Filtering Gasolene.

Fine linen makes a very good filterer when placed over the carburetter and when the head of gasolene is fairly high, but it should not be used under the carburetter when the gasolene has to pass up through it. Linen has a greater affinity for moisture than it has for gasolene. Gasolene purified contains a very small trace of moisture. The linen filter, after being in use for a few days, becomes saturated with moisture, and a film of water envelops and stretches between the threads, the surface tension of water being very high when brought into contact with gasolene, and the consequence is the film of water prevents the gasolene from blowing upward in a regular and constant stream, and the carburation is erratic and unsatisfactory. The linen when first used, or after being dried, may act all right for the first few days, and the motorist may have some difficulty in finding out the cause of the mischief, says J. B. Dunlop, the famous tire inventor.

### The Toper's Best Friend.

Advocates of the automobile need never be at a loss for arguments in its favor, and yet they can wisely welcome every new one placed at their command. Hence they should appreciate the following communication to London Truth, which appears in that paper:

"Sir: The motor car cure for drunkenness is sure and rapid. Intemperance has been the curse of this country for centuries, but with increased motor propelled traffic it is diminishing literally by leaps and bounds. The village toper no longer dares to drink to excess, dreading that on his way home he may be whirled into eternity by a passing automobile. It would be little less than criminal were the government now to regulate the rate of speed of automobiles, seeing that the rapidity with which they travel is so important an element in the new treatment of intemperance."

### Specific Gravity no Criterion

Some interesting tests have just been conducted by the Automobile Club of France, with a view to ascertaining the relative efficiency of motor spirit of varying density. The result of the tests would seem to show that spirit of high specific gravity gives just as good results as the lighter variety—in fact, in this particular case the heavier spirit appears to have secured an advantage. The test was made with ordinary moto-naphtha, with a specific gravity of .680-700, and motoline de Lepretre (density .730). With the motor running at 800 revolutions per minute it was found that of the heavy spirit .660 litre per watt hour and .485 litre per horsepower hour was consumed. The figures for the lighter spirit were .704 litre and .518 litre, respectively.

### Royalty in Ireland.

An automobile tour of the Connemara country was the order of the day for King Edward and Queen Alexandra in Ireland on Wednesday, July 30.

### Some British Humor.

Some interesting things, and some of an amusing character, have been said during the debate in the British House of Lords upon the government bill relating to automobiles. Two good stories were told by Lord Camperdown, one of them to the effect that a policeman who tried to halt an automobilist by stepping into his car was carried seventeen miles from home before the chauffeur, who had put on speed, concluded to stop. A more amusing story was of a bicyclist who was nearly run down by an automobilist and took a rough and ready revenge. He wheeled round and fired two revolver shots after the automobile, observing: "I've got one—one back tire—and I think I've got the other." Another cyclist rode on and discovered that it was so. The automobile had stopped because both back tires were punctured, but the driver had been making so much noise that he never heard the shots.

Among the humors of the debate was the lament of Lord Lamington, who bemoaned the decimation of the nation's poultry, and expressed fear that the fresh egg will soon become a thing of the past if the automobiles are to go on demolishing the originators of eggs.

### Autos in Place of Trains.

People in England who are owners of automobiles now travel from their city to their country houses in their own vehicles, instead of by train. The leisurely class utilize the automobile even further than that and employ it in Continental tours. Several of the best known social lights are doing this, a notable instance being Mrs. Reynolds, who is soon to make an automobile trip from London to Homburg, to meet members of her family who are motoring there, and she will meet there at the same time her daughter, Mrs. Ritchie, who will arrive on an automobile from Ostend. Mrs. J. W. Mackay has left London for Paris, with the intention of making an automobile trip to Gastern, a health resort in Austria.

As soon as Parliament adjourns Prime Minister Balfour will go by automobile from London to his place in Scotland. In the political campaign which will occur during the autumn Mr. Balfour will make his speech making tour of Scotland and England in his motor carriage.

### New Britain's Projected Club.

An automobile club for New Britain, Conn., is favored by the owners of motor vehicles in that place. They are strong enough in numbers to have an effective organization, and the matter is being discussed with an interest which appears to promise an early result.

### Organized at Ogden.

Ogden, Utah, has a newly organized automobile club, the officers of which are: President, O. J. Stillwell; vice-president, A. P. Bigelow; secretary, A. V. Withee; treasurer, F. W. Baker; assistant secretary, John A. Smith; captain, F. H. Blooff.

**Jersey's Seashore Highways.**

Less than a decade ago that part of New Jersey contiguous to the Atlantic Ocean was almost destitute of improved roads. A wilderness of shifting sand, stretched from Sandy Hook to Cape May, broken here and there by insignificant patches of hard roads, most of them being at the northern end. With these to form a basis, however, the work of building firm, smooth roadways, which had earlier been commenced further inland, has gone on apace, until now probably two-thirds of the coast line has been reclaimed.

Even in the pre-macadam days of New Jersey seashore highways, the Rumson Road was famed as one of the most beautiful in America. It was privately built, the Rumson Association, composed of wealthy summer residents of Long Branch and vicinity, having been formed to lay it down. It is now proposed to make this celebrated stretch a stone road in place of the gravel surface which it now possesses. State Road Commissioner Henry I. Budd of New Jersey is preparing plans for State co-operation with the Rumson Association, which built the Rumson Road, looking to this end.

Thomas N. McCarter, William H. Havemeyer, Edward D. Adams, Fred Achells and Jacob H. Schiff represent the Rumson Association.

After the Rumson Road has been made over of stone one of the greatest drives in the world will be ready for automobilists. From Seabright and vicinity there is this famous road over to Red Bank, pronounced by travellers the finest drive of the kind in the world, being flanked the whole distance with handsome summer mansions and spacious grounds, beautified and adorned with all that wealth and the art of landscape gardening can produce. There is another improved road over the Navesink Hills to Atlantic Highlands, with a branch through Leonardsville to Chapel Hill. This system of improved roads continues from Oceanic through Fair Haven to Red Bank.

From Long Branch there is a splendid improved road back to Eatontown, from which point drivers have the choice of an improved road through Shrewsbury to Red Bank, and

thence through the Rumson Road back to the coast, or of proceeding from Eatontown straight inland through Tinton Falls, Scobeyville and Colt's Neck to Freehold. From this point the driver may proceed on another improved road through an interesting region back to the coast at Sea Girt.

This road passes through a number of interesting old villages, including Turkey, Lower Squankum, Allaire and Allenwood. Continuing the drive, the traveller may go from Lower Squankum by another improved road to Lakewood, and thence back to the coast at Point Pleasant.

From Bay Head there is a good road all the way up the shore to Seabright, a considerable part of the way in sight of the surf. From Bay Head southward there is an improved road from the coast connecting with the inland country until Atlantic City is reached. The so-called shore road is west of Barnegat Bay.

From Lakewood as a starting point this road passes through Toms River, Cedar Creek, Forked River, Waretown, Barnegat, Manahawken, to Tuckerton. The short gap between Tuckerton and Bass River is now being completed. From Bass River the improved road continues through Port Republic, Oceanville, Absecon, to Pleasantville, and thence across the meadows to Atlantic City. From this point it continues down the coast to Longport, at Egg Harbor Inlet.

This shore road from Lakewood to Atlantic City is one of the most interesting long drives in New Jersey. It passes through a number of quaint old villages, largely inhabited by retired sea captains and seafaring people. There are a great many large, dense forests and cedar swamps, and numerous views of great stretches of salt marsh and Barnegat Bay. With the exception of two or three miles in Ocean City, there are no more improved roads until Cape May Point is reached. From there an improved road runs to Cape May Court House, and this is the only improved road in Cape May County.

From Atlantic City, taking Pleasantville as a starting point, there is an improved road to Absecon, Egg Harbor City, and thence almost in a straight line to Camden. There is another improved road from Pleasantville to

May's Landing over to Egg Harbor City, and thence back to the starting point.

**Old Game Tried at Swampscott.**

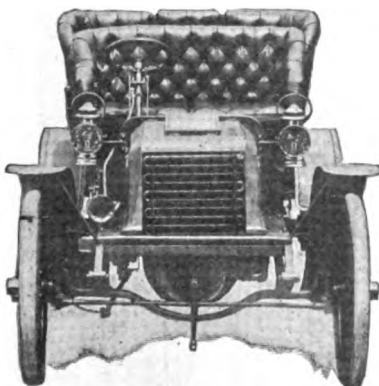
Automobilists passing recently through the town of Swampscott, which is one of the pretty seaside resorts near Boston, had to pass through a very elaborate trap. Charles Dunlap, the chief of police, marked off an eighth of a mile straightaway on Atlantic avenue, one of the favorite speedways. At one end of this automobile trap he placed Officer Charles Connell, whose duty it was to wave a newspaper every time an automobile went over the starting line. At the same instant Patrolman Joseph Shorey, at the other end of the course, would shout "Time!" Then Chief Dunlap would count the seconds elapsing while the automobile sped from one course limit to the other.

Screened from view behind one of the granite gateposts at the entrance to the Esterbrook estate, Chief Dunlap would make a lightning calculation with pencil and a little pad of paper. If the speed limit had been exceeded he would pass the word to Shorey, who would give a handkerchief signal to Officers Samuel T. Harris and Adelbert S. Hammond, one hundred yards down the avenue. These two would then step into the middle of the road and halt the offending automobilist.

Several captures were made in the trap, but some of the motorists were too fly for the "cops," and among them were four women, who came along one afternoon in a big red automobile. As they passed the officers on guard, one of them held up a watch and cried, "You can't pull us in!" Chief Dunlap's arithmetic showed that they were running just within the limit.

**Have Modified the Rule.**

The Boston park commissioners have notified the police department that they have adopted a modified rule in regard to the license numbers of motor vehicles. It will no longer be necessary for the automobilist to have the number of his permit conspicuously displayed in Arabic figures not less than one inch in height on the lamps and not less than two inches in height on the rear of the vehicle.



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## The Week's Patents.

734,529. Elastic Vehicle Tire. Henry G. Fiske, New York, N. Y., assignor, by mesne assignments, to Electric Vehicle Company, Jersey City, N. J., and New York, N. Y., a corporation of New Jersey. Filed May 17, 1899. Serial No. 717,225. (No model.)

Claim.—The combination with a solid tire of elastic material, of a plurality of sectional locking wires embedded therein and clamps engaging said wires also embedded in the tire, said clamps formed with tubular connectors for uniting the ends of the sectional wires.

734,546. Galvanic Battery. Henry Halsey, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J., a corporation of New Jersey. Filed December 10, 1901. Serial No. 85,308. (No model.)

Claim.—In a battery, the combination of a cell containing an excitant solution, a cover therefor, positive and negative elements, and a vertical shaft so journaled in said cover as to be removable therewith and upon which shaft is mounted one of said elements, the other element being suspended from the cover and said shaft extending outside of the cell, and means for rotating said shaft, substantially as described.

734,547. Electric Battery. Henry Halsey, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J., a corporation of New Jersey. Filed April 18, 1902. Serial No. 103,644. (No model.)

Claim.—In a battery, the combination with the electrolyte and the elements, of means for maintaining a horizontal flow of the electrolyte in the cell, the electrolyte brushing against the elements, substantially as described.

734,548. Electric Battery. Henry Halsey, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J., a corporation of New Jersey. Filed April 18, 1902. Serial No. 103,645. (No model.)

Claim.—In a battery, the combination of a casing having a re-entrant portion, a shaft mounted therein, a cylindrical element mounted upon said shaft, a similarly formed element supported in the casing, opposite said first named element, an electrolyte between the same, and means for rotating the shaft, substantially as described.

734,549. Electric Battery. Henry Halsey, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J., a corporation of New Jersey. Filed April 18, 1902. Serial No. 103,646. (No model.)

Claim.—In a battery, the combination with the electrolyte, of a plurality of open ended concentrically arranged elements submerged in said electrolyte, a propeller in said electrolyte between the elements, and means for operating the propeller, substantially as described.

734,562. Valve Gear for Explosive Engines. William H. Jones, Cambridge, Mass. Filed November 3, 1902. Serial No. 129,843. (No model.)

Claim.—In a gas engine of the character described, a cylinder provided with a suitable exhaust port; an exhaust valve and stem in said cylinder; a lever pivotally mounted on the machine within the gear case, and comprising the substantially

straight arm, and the arm provided with the curved face; a controlling lever pivotally supported by the machine and with its operating end engaging with the curved portion of said lever; and a lever intermediate with the straight arm and the valve stem, whereby motion is communicated from the straight arm of said lever to the valve stem, substantially as described.

734,588. Wheel. Conrad Miller, Leadville, Col. Filed October 3, 1900. Serial No. 31. (No model.)

Claim.—In a wheel, the combination with the hub, of spoke securing sleeves arranged thereon and each provided with an annular flange, said flange being provided at each of its sides with ribs extending tangentially to said hub, the ribs at one side being approximately opposite the ribs at the other side, whereby said ribs are arranged in pairs, one of the ribs of each pair being inclined in a direction reverse to the direction of inclination of the other rib, a rim, and spokes extending from said rim and connected to said ribs, whereby said spokes are also arranged in pairs, one of the spokes of each pair extending reverse to the direction of the other spoke thereof.

734,742. Steering Device. Marshall W. Patrick, Niles, Cal. Filed September 11, 1902. Serial No. 123,025. (No model.)

Claim.—In a steering device, the combination with the steering post, of a stem attached thereto, a laterally movable rotatable steering handle, and a pivotal connection between the end of said stem and the end of said steering handle maintaining said stem and steering handle oblique to each other, whereby when said steering handle is turned on its axis the stem is rotated about the steering post, substantially as described.

734,826. Electric Battery. Henry Csanyi, Felso-Dobsza, Austria-Hungary. Filed March 4, 1903. Serial No. 146,141. (No model.)

Claim.—An electrical element or battery the cathode of which is immersed in nitric acid and the anode in an alcohol solution containing permanganate of mercury and potassium cyanide, the depolarizer being separated from the solvent by means of a diaphragm.

734,848. Carburetter for Explosive Engines. William A. Gill, Portland, Ore. Filed April 10, 1902. Serial No. 102,269. (No model.)

Claim.—A carburetter for explosive motors comprising an outer shell, detachable heads closing the upper and lower ends of the shell, the lower head being provided with an inlet passage, an outlet passage and an oil feed passage and having an air inlet with an upwardly extending threaded portion, an air tube concentrically arranged within the shell and forming an air passage and with the shell an oil reservoir, said reservoir being in communication with the inlet and outlet passages and connecting with the air passage through the oil feed passage, the tube passing through the upper head and having an enlarged upper end to bear upon said head and a threaded lower end engaging the upwardly extending threaded portion of the lower head, an overflow pipe in the reservoir communicating with the outlet passage, a feed pipe in the tube communicating with the oil feed passage, and a valve governing the oil feed passage substantially as specified.

734,849. Process of Making Sulphuric Acid. Gustave Gin, Paris, France. Filed October 6, 1902. Serial No. 126,107 (No specimens.)

Claim.—The improvement in the art of manufacturing sulfuric acid consisting in

first cooling the gases of sulfureted ores as the former come from the furnace, and ridding them of the solid matters held in suspension, by deposit, then subjecting them to refrigerative action, next depriving them of sulfuric anhydride by washing with sulfuric acid, after that spraying them with cold water slightly acidulated with sulfurous anhydride, then submitting them to a heating action, next conducting the saturated solution, by this time formed, through a bed of refractory material, when it divides itself and begins to lose its sulfurous acid by contact with an air mixture, and finally expelling the sulfurous anhydride from the liquid bed by hot air bubbled up from beneath, which mixes sufficiently with the sulfurous anhydride to realize the integral oxidation in the catalytic operation.

734,851. Electric Igniter for Explosive Engines. George A. Goodson, Minneapolis, Minn. Filed December 16, 1901. Serial No. 86,009. (No model.)

Claim.—An electric igniter for explosive engines, comprising an electric generator having a rotary member, intermittently acting means turning said member always in the same direction and at a speed which is independent of the speed of the engine, and a device actuated by the engine, for tripping said means into action, substantially as described.

734,852. Electric Igniter for Explosive Engines. George A. Goodson, Providence, R. I. Filed March 13, 1903. Serial No. 147,558. (No model.)

Claim.—The combination with an explosive engine, of an electric generator, an impelling spring acting intermittently to rotate the movable member of said generator, always in the same direction, at a speed independent of the speed of the engine, an engine driven trip for setting said impelling spring under increased tension and tripping the same into action, and a friction brake operative to stop the spring impelled parts without jar or vibration.

734,857. Electric Battery. Henry Halsey, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J., a corporation of New Jersey. Filed April 18, 1902. Serial No. 103,648. (No model.)

Claim.—In a battery, the combination with the electrolyte and the elements, of a stirrer having its central portion cut away, and means for moving said stirrer between said elements, substantially as described.

734,858. Electric Battery. Henry Halsey, New York, N. Y., assignor, by mesne assignments, to Halsey Electric Generator Company, Jersey City, N. J., a corporation of New Jersey. Filed August 2, 1902. Serial No. 118,028. (No model.)

Claim.—In a battery, the combination with the case, of two cylindrical elements one within the other, a porous cup surrounding one of said elements, a depolarizer in said cup, an electrolyte surrounding the other element, and means for maintaining movement of the element in the depolarizer, substantially as described.

734,864. Muffler. James G. Heaslet, Philadelphia, Pa., assignor to the Autocar Company, Ardmore, Pa., a corporation of Pennsylvania. Filed July 7, 1902. Serial No. 114,548. (No model.)

Claim.—A muffler comprising a series of cell frames arranged to afford a passage for gases or vapors through their interiors in succession, each frame having an external encircling rib, plates arranged at intervals

throughout the structure, and having each a series of perforations for the passage of gases or vapors, and means for securing the parts together, substantially as set forth.

734,868. Exhaust Muffler. Christian C. Hill, Chicago, Ill. Filed July 28, 1902. Serial No. 117,230. (No model.)

Claim.—In an exhaust muffler, the combination of a housing formed with a receiving chamber at one end and a discharge opening at the other end, and means within said casing for partitioning the bore thereof into multiple series of closely arranged passages of different lengths and affording a divided discharge area in excess of the main exhaust passage, substantially as set forth.

734,878. Muffler. Thomas H. Jamison, Claysville, Penn., assignor to himself and Horatio H. Miller, Claysville, Penn. Filed Aug. 30, 1902. Serial No. 121,603. (No model.)

Claim.—1. A muffler, comprising a shell having an inlet pipe extending centrally in said shell to near the rear end thereof, a stepped conical divider at said rear end with its apex extending into said pipe, said steps being arranged one without the other till the periphery of the shell is reached, an outlet from said shell at the forward end thereof, and a breaker interposed between the shell and inlet pipe at a point between the conical divider and the outlet of said shell, said breaker being in the form of the frustrum of a cone with apertures in its sides, as set forth.

734,891. Variable Speed Mechanism. Harry A. Knox, Springfield, Mass., assignor to Knox Automobile Company, Springfield, Mass., a corporation. Filed Feb. 19, 1903. Serial No. 144,046. (No model.)

Claim.—1. A variable speed mechanism comprising a driving shaft and a driven member loosely mounted thereon to transmit movement to another mechanism, a circular member as n, rotatable with the shaft and endwise movable thereon more or less and a gear on said member; a second circular member as e with which said driven member is positively connected, pinions mounted on second circular member and meshing with the gear on the first named circular member, a rack for said pinions and means to hold it stationary, together with means to clamp said first and second circular members together.

734,896. Portable Electric Accumulator. Lambertus A. Lammerts, Rotterdam, Netherlands. Filed June 20, 1902. Serial No. 112,482. (No model.)

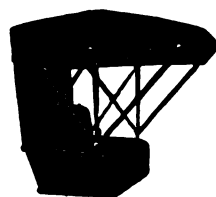
Claim.—In a portable electric accumulator of the kind described, the combination with the electrodes, the terminals and the sealing up mass, of connecting wires embedded in said sealing mass and formed in the shape of cylindrical helical springs, substantially as and for the purpose stated.

734,912. Pneumatic Tire. Arthur H. Marks, Akron, Ohio, assignor to the Diamond Rubber Company, Akron, Ohio, a corporation of Ohio. Filed Sept. 9, 1902. Serial No. 122,698. (No model.)

Claim.—In a detachable pneumatic tire, the combination, with the rim, of an inner tube, an outer sheath having at its lower edges flanges projecting abruptly outwardly, side plates outside of the sheath with their lower edges abutting against said flanges, the outer surfaces of said flanges being flush with the outer surfaces of said plates, and bolts passing through the plates, the sheath, and the rim above said flanges, substantially as described.

734,955. Electric Ignition Generator. Benjamin P. Remy, Anderson, Ind., assignor to Remy Electric Company, Anderson, Ind., a corporation of Indiana. Filed July 5, 1902. Serial No. 114,352. (No model.)

Claim.—In an electric generator, one or more magnets, a stationary armature between the poles of said magnets and an oscillatory inductor passing through the armature.

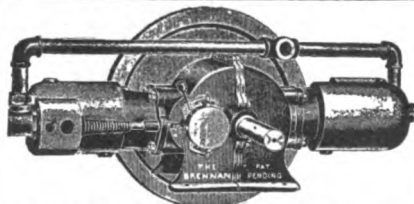


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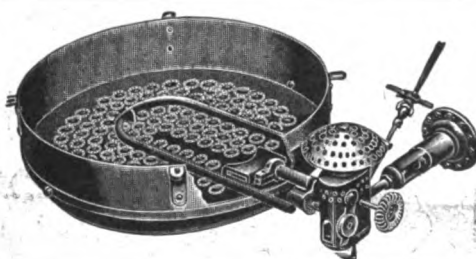


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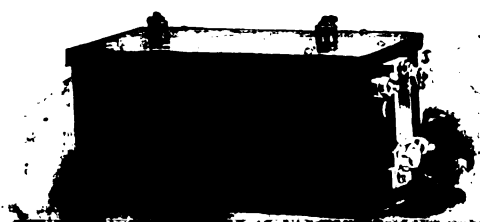
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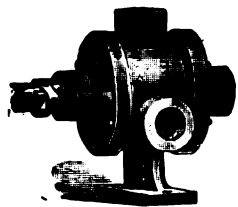


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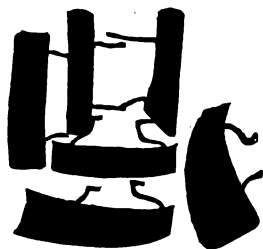
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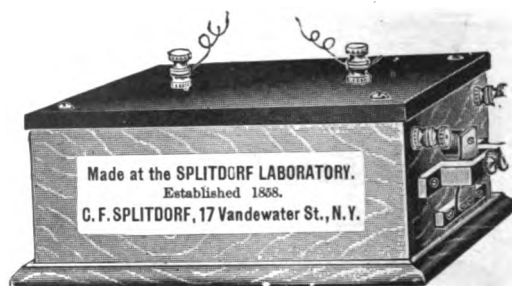
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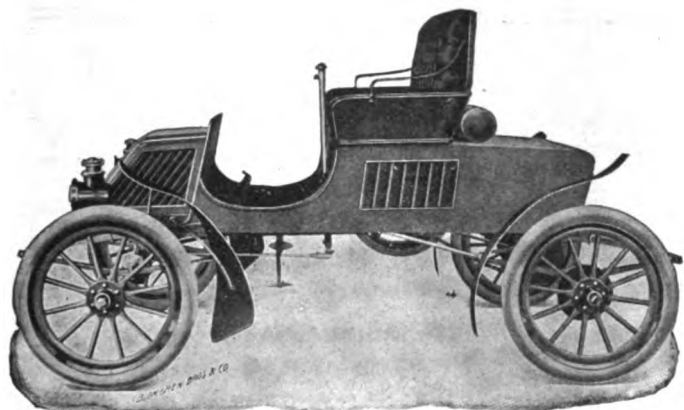
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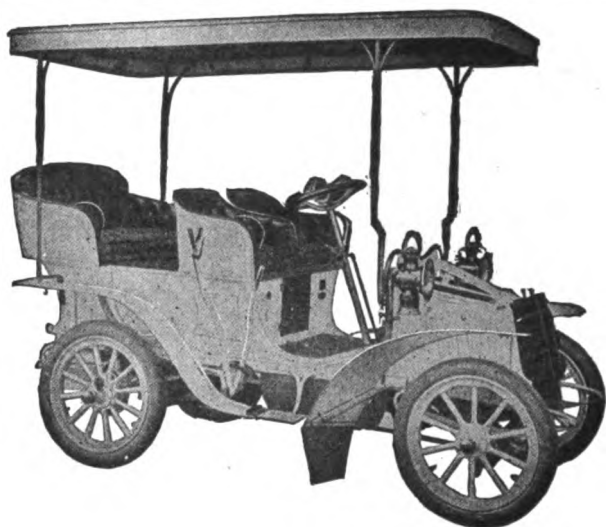
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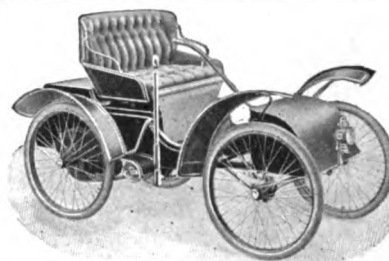
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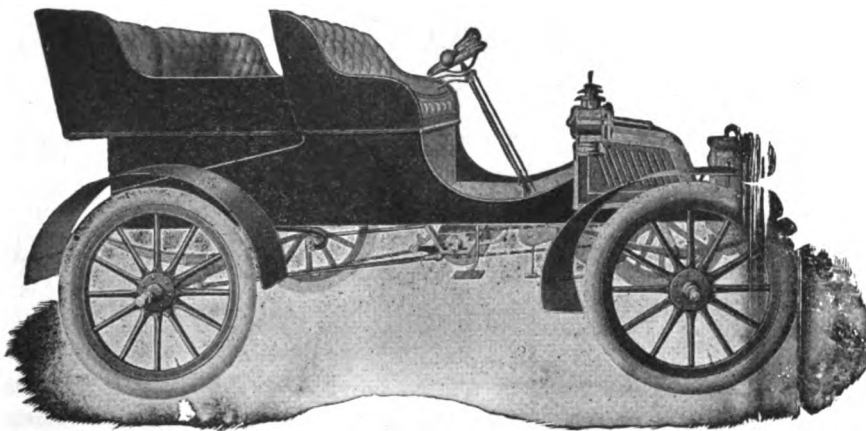
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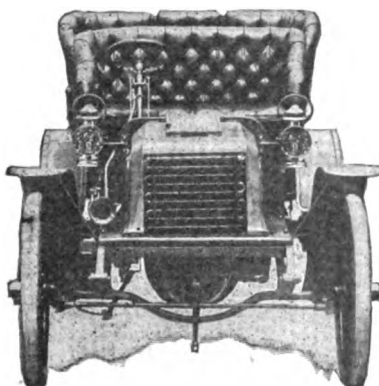
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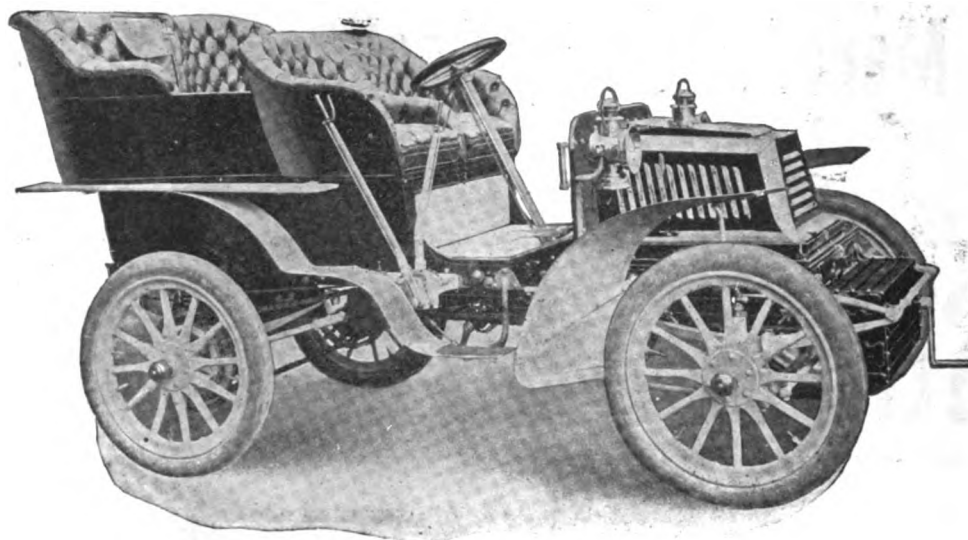
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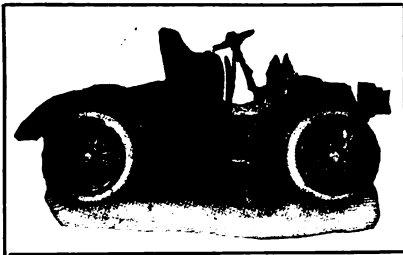
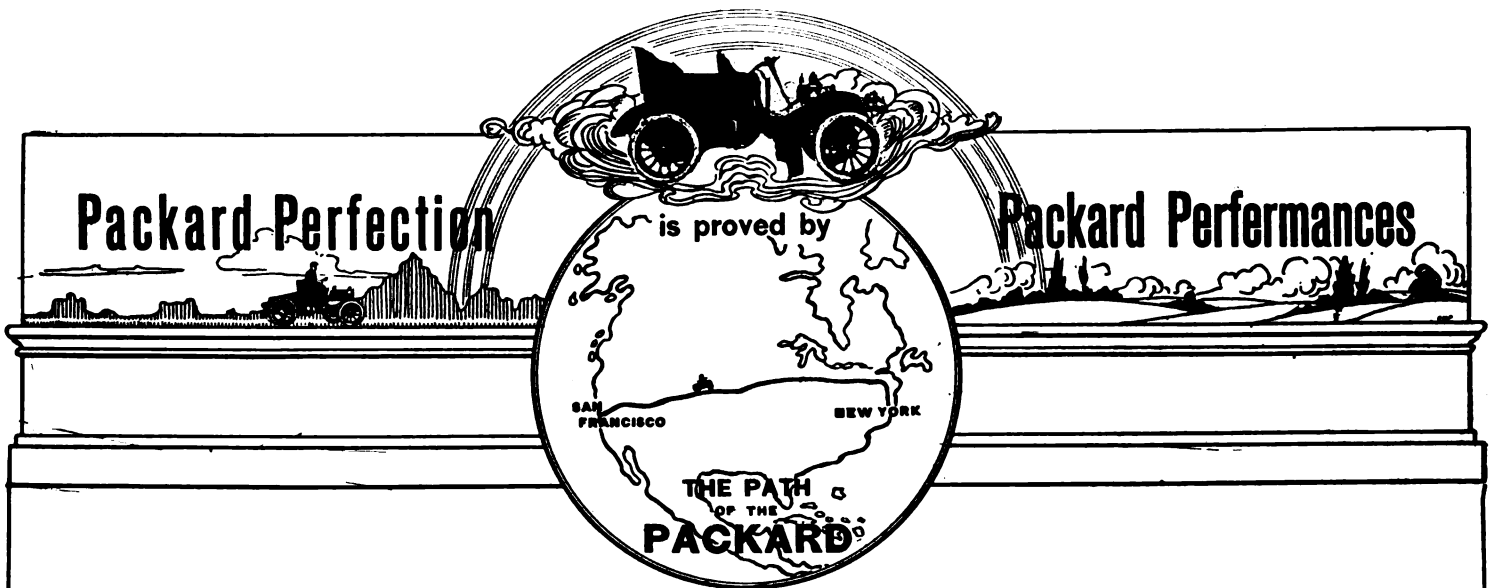
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Time was when everything connected with automobiles HAD to be taken more or less on faith, but that condition no longer exists. The people have been educated to challenge every statement not accompanied by proof—to accept no record until fully convinced of its truth.

For him who registers from Missouri, the facts are always laid bare (by Packard) and the closest investigation is courted from “the man who must be shown.”

Our Overland trip was planned to thoroughly test our car. No American endurance contest has been severe enough for this, so we put it against the hardest task ever attempted by an automobile.

Far from any desire to conceal the slightest detail or misrepresent a single item, we are most anxious that all who are interested may themselves secure their own proof, and to remove every possible obstacle we give herewith the first and most important data.

#### THE ITINERARY AND SCHEDULE.

Left San Francisco, Cal., June 20.	Arrived Red Cliffe, July 16.	UTAH.
Arrived Port Costa, Cal., June 20.	“ Buena Vista, July 17.	Arrived Tacoma, July 2.
“ Sacramento, Cal., June 21.	“ Florissant, July 18.	“ Promontory, July 3.
“ Placerville, Cal., June 23.	“ Colorado Springs, July 19.	“ Salt Lake City, July 4.
“ Sugar Loaf, Cal., June 23.	“ Denver, July 20.	“ Tucker, July 7.
“ Carson City, Nev., June 20.	“ Fort Morgan, July 25.	“ Price, July 8.
“ Reno, Nev., June 25.	“ Sterling, July 26.	“ Green River, July 10.
“ Wadsworth, Nev., June 26.	NEBRASKA.	“ Thompsons, July 11.
“ Lovelocks, Nev., June 27.	“ North Platte, July 27.	COLORADO.
“ Winnemucca, Nev., June 28.	“ Kearney, July 28.	“ Grand Junction, July 12.
“ Battle Mountain, Nev., June 29.	“ Grand Island, July 29.	“ Rifle, July 13.
“ Elko, Nev., June 30.	“ Fremont, July 30.	“ Glenwood Springs, July 14.
“ Wells, Nev., July 1.	“ Omaha, July 31.	“ Gypsum, July 15.

It is not necessary for you to accept the mere statement of our “ad man” for the above.

A line to the postoffice, telegraph station or the principal hotel at any or all of the above points will enable you to check any and every day’s run of “Old Pacific” on its journey east.

Next week we will give you some more data on the itinerary.

Later on we will have something to say about repairs and the fact that “Old Pacific” is a standard Model F.

You will not have to take our word for that, either—but remember the Packard is carrying “A Message to Garcia.”

“ASK THE MAN WHO OWNS ONE.”




## THE PACKARD MOTOR CAR COMPANY,

### WARREN, OHIO.


Member of the Association of Licensed Automobile Manufacturers.



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 **DIAMOND Tires are Honest.**

 **Honest Tires Honestly Made  
and Advertised and Sold  
Without Misrepresentation.**

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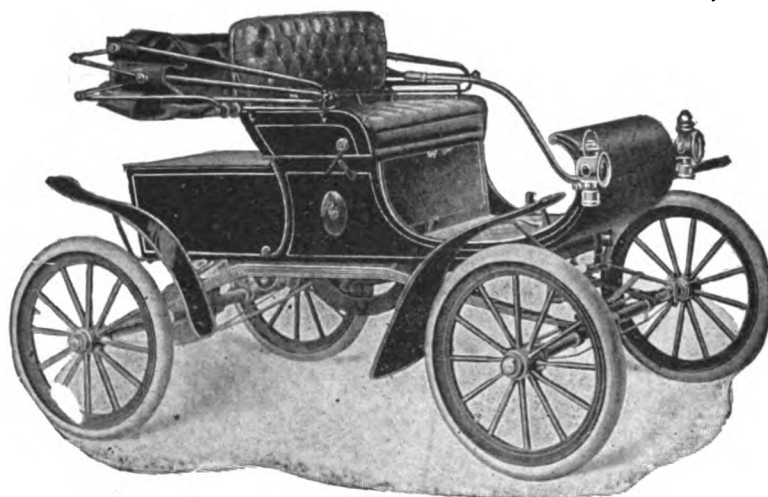
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PRICE, \$650.00

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DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
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LANSING, MICH.—W. K. Prudden & Co.  
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FRANCE—Eugene Merville, Paris.  
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HOLLAND—Bingham & Company, Rotterdam.  
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SO. AUSTRALIA—Duncan & Fraser, Adelaide.  
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JAPAN—Bruhl Bros., Yokohama and New York.  
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# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, August 13, 1903.

No. 20

## CHANCE BLOW MAKES BAILEY LAW GROGGY

**Licensing Provision as Drawn Declared Unconstitutional by City Magistrates—This Ruling Affects Only New York County—Decision Rendered in MacWilliam Case After the Filing of Demurrer—Not a Prepared Case and the Point a Technical One—Other Interesting Verdicts.**

A blow that puts the Bailey law, as pugilists would say, on Queer Street, whence it came, has been dealt by the New York City Board of Police Magistrates. It was not the clean knockout blow that it was promised would be dealt by the law committee of the Automobile Club, but only a punch landed in a mixup that makes the law groggy so far as its application in New York County is concerned.

The Court of Special Sessions has decided that the licensing clause is unconstitutional because it discriminates between persons of the same class, i. e., automobilists using the highway. Therefore no license numbers need hereafter be worn in New York City. This is all the decision amounts to; for the jurisdiction of the police magistrates does not extend beyond Greater New York, and this decision may be reversed by a higher court, though it seems unlikely. The decision will not affect automobilists in New York State generally, though it will relieve the few such as the cabmen and the owners of electric coupes kept for city use exclusively. Its prime virtue is that it clears the muddle the trade was in with regard to the use of demonstration cars. It now seems settled that dealers need no longer fear being intercepted by the police and forced to explain in court that they are dealers. The decision does not by any means establish the unconstitutionality of licensing automobilists generally and compelling them to display num-

bers. The ruling of unconstitutionality was made upon a technicality that an amendment of the law may rectify, an amendment wiping out manufacturers and dealers as an excepted class of automobilists.

The decision was made in the case of James MacWilliam, an employe of the F. A. La Roche Co., who was arrested on June 26. It was handed down on last Friday, August 7, at the same time that several other interesting cases were disposed of by the Court of Special Sessions.

Police Commissioner Greene was absent from the city at the time the decision was rendered, and for a few days the situation was still an uncertain one, because no new instructions were issued to the police, and it was not known how they would act in the absence of orders from headquarters, although the dealers were safe in operating demonstration cars under the former order that they would be immune if their cars displayed their firm name and address, and no arrests were heard of having been made.

The full text of the decision as rendered by the court is given further on. It is an able and interesting document in many ways.

It is broadly suggested that while the ruling of this petty court did not consider the constitutionality of a State law making a class of automobilists separate from other users of the highways, this may be done by a higher court. The document says that

the Bailey law as drawn, by discriminating between automobilists, by making a class within a class, "clearly offends the provisions of the Fourteenth Amendment of the Federal Constitution." If the separation of the manufacturers and dealers using cars for business purposes on the highway from those who use them for pleasure is an offence against the constitution, then it would seem to the lay mind to be quite as great an offence to separate the pleasure drivers of the highway who choose to go out in a motor carriage from the pleasure drivers who choose to go out in horse-drawn vehicles or on bicycles. This is the real issue not yet tested by the law committee of the Automobile Club, and the inadequate decision against the law obtained in a police court is only a "chance blow," for the court leaped over the opportunity to dismiss on the ground of "no offence" in order to render the written decision on constitutionality.

The Fourteenth Amendment of the Constitution of the United States contains five sections. Sections 2 and 3 relate to the qualifications of voters, the election of Representatives, etc. Section 4 deals with the subject of the public debt, and Section 5 gives Congress power to enforce the amendment. The only part of the amendment that has a bearing on class legislation is in the first section, which in full is as follows:

"All persons born or naturalized in the United States and subject to the jurisdiction

thereof are citizens of the United States and of the State in which they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws."

W. W. Niles, of the law committee of the Automobile Club of America, speaking of the MacWilliam decision, said:

"This is an opening wedge for the framing of a fair automobile law next year. I believe that it will result in automobilists and those opposed to the present methods of operation meeting on common ground and thoroughly thrashing out the question. I am sure that the decision will be sustained upon appeal. This decision covers the operation of machines at least in Greater New York."

The decision:

**COURT OF SPECIAL SESSIONS OF THE  
FIRST DIVISION OF THE CITY OF  
NEW YORK.**

Present: Hons. Willard H. Olmsted, P. J.;  
Julius M. Mayer and William E. Wyatt,  
J. J.

The People, etc.,

vs.

James T. MacWilliams.

The complainant, a police officer, charges that the defendant on the 26th day of June, 1903, in the county of New York, did wilfully violate Sections 166 and 169a of the Highway law as amended by Chapter 625 of the Laws of 1903, in that, on said date, the defendant did operate an automobile along the west drive near Seventy-second street, in Central Park, without having the number of the certificate issued to the defendant under Section 166 placed upon the back of said automobile in a conspicuous place so as to be plainly visible.

The defendant demurs to the complaint on the ground that the facts set forth do not constitute a crime, and asserts the unconstitutionality of the statute on several grounds.

The sections referred to in the information are as follows:

Section 166 and Section 169a attached hereto.

At the outset of Section 166 it will be noted that every owner of an automobile is required to file a statement and pay a fee, whereupon the Secretary of State shall issue to such person a certificate; but it is further provided that this section shall not apply to a person manufacturing or dealing in automobiles or motor vehicles, except those for his own private use and excepting those hired out. Every person desiring to operate an automobile as mechanic, employe or for hire, is also required to make a statement and pay a registration fee, and thereupon the Secretary of State shall issue to such person an operator's certificate. By virtue of Section 169a every such automobile (meaning thereby an automobile for which a certificate has been obtained by its owner) shall have the number of the certificate placed upon the back thereof in a conspicuous place, so as to be plainly visible.

The statute further provides that "a person who shall operate or run any automobile upon any highway without a certificate first had and obtained, as herein provided, or being the holder of such a certificate shall refuse to exhibit the same on demand to any peace officer, shall be deemed guilty of a

misdemeanor," and upon conviction shall be punishable by certain penalties of fine or imprisonment as well as by a suspension of his right to run an automobile for certain periods of time.

By virtue of Section 166 it is provided that every mechanic, employe or operator for hire shall at all times when operating an automobile carry his certificate with him; but it is not clear whether the owner of the automobile is required to carry his certificate with him, or whether the owner's certificate should always accompany the automobile when in use upon the highway. It is thus apparent that in certain cases where the certificate is not obtained, and in other cases where it is not exhibited to a peace officer on demand, and in other cases such as that at bar, where the number of the certificate is not placed upon the back of the automobile in a conspicuous place so as to be plainly visible, the offender is subjected to severe penalties.

In the case at bar it appears from the complaint that the defendant is the owner of the automobile in question, and if found guilty may be punished by a fine of fifty dollars and a suspension of his right to run an automobile for a period of not less than two weeks. (Sec. 169a and Sec. 169b.)

It is contended that the information is insufficient because there is a failure to negative certain exceptions in the statute. This question of pleading is discussed in the cases of the People vs. Farr and People vs. Taza, decided herewith. The allegation in this complaint that the defendant had a certificate and that it was the number of that certificate which he failed to have displayed on his automobile presupposes that he was one of the persons required to obtain a certificate and render the negative allegations unnecessary. Had it not been for such affirmative allegation that the defendant was the holder of the certificate required by the statute the complaint would have been defective. The complaint therefore being good in form, the sole question before the court is the constitutionality of the provisions attacked.

The Highway law, of which the sections in question are amendments, is a police regulation, enacted by the legislature for the safeguarding of the public upon the highways of the State.

It is elementary that all persons have the right to use the public highways, subject to reasonable regulations which make for the safety of the community.

Under this statute the obtaining of a certificate is not based upon the skill of the proposed certificate holder. The only purpose which the legislature could have had in providing for the system of registration, certification and numbering was the identification of automobiles and the persons operating the same, so that in the event of accident, injury or misconduct the identity of the person operating the automobile could be readily ascertained.

It is fundamental that a legislative enactment is not valid which discriminates between persons of the same class. It is claimed by the learned counsel for the defense that the persons of the same class in this case are all the persons who use the highway, whether operators of automobiles or persons riding or driving horses, or using any other method of locomotion regulated by the Highway law. Whether this contention is correct is not necessary for us to determine. It is clear that all persons operating automobiles on the highway are in the same class, and the statute must therefore subject all such persons to the same regulations.

There is, however, a class of owners or operators of automobiles who are excepted out of the statute. These are persons who manufacture or deal in automobiles, and

such persons are not required to file a statement with the Secretary of State, nor to pay the registration fee, nor to have a certificate, nor to cause to be displayed upon their automobiles the number of the certificate. There is thus no statutory means whatever of identifying the automobiles or the persons of this excepted class. It is contended that the exception applies to manufacturers or dealers only when the automobiles are not upon the highway, and in support of that contention we are referred to the provision of the statute that the exception section shall not apply where a manufacturer or dealer operates his automobile for his own private use or for hire.

This contention cannot be sustained. The highway law can only refer to the use of vehicles of various kinds upon the highway, and cannot refer to the use of vehicles upon one's private property. The legislature would have no power to require a certificate for the operation of a vehicle on one's own private property unless such operation was a nuisance. Therefore the exception in behalf of the manufacturers and dealers can refer only to the use by them of automobiles upon the highway for purposes other than their own private use or hire. "Own private use" undoubtedly refers to a use not connected with the display, test or demonstration of the automobile for purposes of manufacture, purchase or sale.

By the enactment of this exception a situation was created whereby one class of citizens owning automobiles can be readily identified and another class of owners cannot be identified by the same means. For instance, a citizen owning an automobile and operating the same for his enjoyment may be readily identified by statutory means if he violates the speed provisions of the law or any ordinance, while the dealer who is demonstrating the qualities of his machine may escape under like circumstances because of the lack of statutory means of identification; and as a consequence a private owner may be subjected to severe penalties which the manufacturer or dealer may readily escape. Thus, the statute discriminates between persons of the same class, to wit: Persons operating the same kind of vehicles upon the highway. This is a discrimination which clearly offends the provisions of the Fourteenth Amendment of the federal Constitution. It therefore follows that the requirements of the law in regard to filing a statement, registration and certification, and the display of the number of the certificate are unconstitutional, in so far as they are applicable to owners of automobiles and motor vehicles, and as under our construction of the statute the defendant was not required to obtain a certificate, he was not, of course, required to display the number of his certificate on the back of the automobile. The provisions of the statute in relation to the registration and the certification of mechanics and employes are not before us for determination and we do not pass upon the same.

It is suggested by the learned District Attorney that this court should not pass upon the constitutionality of the statute we discuss.

It is undoubtedly the policy of the lower courts not to pass upon the constitutionality of a statute where there is no means of review, and had the defendant gone to trial and had this question arisen upon a motion in arrest of judgment, this court, in pursuance of well settled policy, would not have considered the constitutional question; but as an appeal lies from the allowance of a demurrer the people have full opportunity to test the question involved, and in any event the grand jury has the power to indict the defendant as for misdemeanor—so that there

(Continued on page 748.)

## ENDURANCE TEST NO PLEASURE JAUNT

**Rules Framed for the Run to Pittsburg are Drastic—No Stops Without Penalization—All Repairs Result in Loss of Points—Brake, Hill Climbing, Weight and Finish—Condition Tests Provided for—Observers Change Each Day—Time System Abolished.**

In preparing the rules for its "First Annual Endurance Test" the National Association of Automobile Manufacturers have made it plain that they consider the industry to-day sufficiently advanced to submit to a contest that will lay bare the weak points of the competing cars. For the conditions given in minute detail make necessary a test of character most unusual in this country. This, the third great American endurance contest, will be one infinitely more severe than last year's to Boston and return, just as that one was an immense advance over the Buffalo run of 1901.

Drastic in the extreme are the conditions of the run from New York to Pittsburg by way of Cleveland scheduled to begin October 7. In brief, they provide that no stops and no repairs shall be made either to cars or tires without penalization; that no repairs shall be made except in the running time, by the operator or his mechanic accompanying the car or the observer, and with tools and parts carried en route or obtained at local repair shops; and that an account shall be taken of all replacements, and a charge made against the car on account of them. Starting with a credit of 3,000 points, there shall be a deduction of one point for each minute stopped; and all stops between controls for supplies shall be included in this charge.

This test, the most important of all, is but one of five. The other four are, respectively, a brake test, a hill climbing competition—both to take place at the finish of the run—and tests of weight carrying capacity and of condition of the car at the finish. These furnish a maximum of 3,000 points, or 6,000 in all, and three classes of certificates are to be issued, based on percentages of over 90, 80 and 70 per cent, respectively.

On the other hand, the elaborate system of time limits which characterized last year's contest are wiped out at once fell swoop. Running time figures not all; only stoppages. The night controls close at midnight, and cars arriving after that time are penalized. Outside of that it is go as you please, subject to local ordinances and regulations,

To cap all, the observers are forbidden to give out any times, or indeed any other information. A superintendent of observers is provided for, however, and presumably he will give out information each night.

It is noteworthy that no change of tire makes is permitted; cars may have replacements, but they must be the same make as the original parts; and all replacements are charged against the car.

The entrance fee is placed at \$25, and there is no restriction as to the number of entries one manufacturer may make. It is provided, however—and this will probably cause some uplifting of brows—that each contestant must provide an observer and pay his expenses during the contest. Such observer, however, will be given a different car each day, and he shall never officiate in a car owned or controlled by the entrant who selected him.

It is proposed to mark turnings and all doubtful points by scattering confetti thereon. If the small boys along the route learn of this in time, they will probably do all they can to aid the conductors of the run.

While the route as a whole is as already given in these columns, viz., up the Hudson River to Kingston, and across Southern New York to Buffalo, thence to Cleveland and return to Pittsburg, a distance of about 827 miles, the details are yet to be settled. To a Motor World man Manager Miles stated on Tuesday that a decision would not be reached until about thirty days before the start. A number of trips will be made over the various routes, and the condition of the roads, especially near the time of the contest, taken into consideration.

The complete rules follow:

The contest shall consist of:

A—Run from New York to Pittsburg, Penn., over a course whose details shall be announced one month in advance of the contest.

B—Brake test.

C—Hill climbing test.

D—Test of weight carrying capacity.

E—Test of condition of car at finish.

For each of these divisions points shall be awarded as hereinafter provided.

### 2-DATES OF THE CONTEST.

The dates of the various sections of the contest shall be as follows, regardless of weather:

October 6—9 a. m., weighing and examination of cars.

October 7—7 a. m., start of the run.

October 7 to 14—Finish of the run.

October 15—7 to 9 a. m., brake and hill climbing tests.

October 15 and 16, and following days—Examination of cars.

### 3-POINTS.

The Run—Maximum points obtainable ..... 3,000

Brake Test—Maximum points obtainable ..... 250

Hill Climbing—Maximum points obtainable ..... 250

Weight Carrying Capacity—Maximum points obtainable ..... 1,000

Condition at Finish—Maximum points obtainable ..... 1,500

Possible points obtainable ..... 6,000

### 4-ELIGIBILITY.

The contest shall be open to all classes of self-propelled vehicles, subject only to the following restrictions:

They must be so constructed that at least two passengers can be carried, seated side by side.

They must be provided with efficient brakes, independent of the engine, and a reversing device.

They must be regularly manufactured and offered for sale to the public.

They must be fully equipped as specified in the entry blank, and no change in equipment or any deviation from the description furnished at the time of entry shall be permitted in any feature of the contest.

They must be equipped with all the seats usually carried.

### 5-CLASSIFICATION.

Vehicles shall be classified according to price as follows:

Class A—\$1,000 and less.

Class B—\$1,001 to \$1,500, inclusive.

Class C—\$1,501 to \$2,000, inclusive.

Class D—\$2,001 to \$2,500, inclusive.

Class E—\$2,501 to \$3,000, inclusive.

Class F—\$3,001 to \$3,500, inclusive.

Class G—Over \$3,500.

### 6-WEIGHING AND EXAMINATION.

Weighing, examination and sealing of cars shall commence at 9 a. m. Each con-

(Continued on page 743.)

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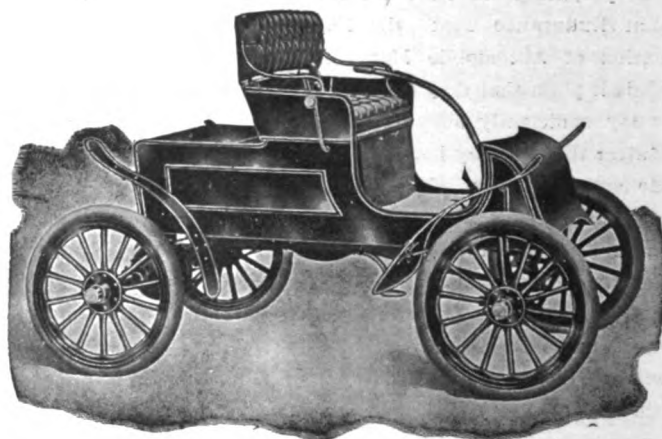
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NEW YORK, AUGUST 13, 1903.

## The Way and The Leader.

Able and interesting, and even gratifying to some extent, as it is, the decision of the Court of Special Sessions of New York City on the Bailey law is not satisfactory. Practically nothing has been gained by it beyond the relief from license obligations of the small number who maintain automobiles exclusively for city use, and most of these have already obtained licenses. This is not the high court decision that was so abundantly promised by the supporters of the Bailey law.

### DECISION ON AN ERROR.

Furthermore, it is worth noting that the decision seems to have been rendered through an error of allegation or of understanding. It is stated in the decision that the defendant, MacWilliam, "is the owner of the automobile in question"; also that "the allegation in this complaint that the defendant had a certificate and that it was the number of

that certificate which he failed to have displayed on his automobile presupposes that he was one of the persons required to obtain a certificate and render the negative allegations unnecessary. Had it not been for such affirmative allegation that the defendant was the holder of the certificate required by the statute, the complaint would have been defective. The complaint therefore being in good form, the sole question before the court is the constitutionality of the provisions attacked."

It is difficult to understand how the allegation could have been made that MacWilliam was the owner of the automobile and had an owner's license. MacWilliam, it is understood, was not the owner, but a chauffeur, and all he had was a chauffeur's license, as he explicitly stated at the time of his arrest. Therefore if the allegation was made it was incorrect, and the complaint was defective after all, and the case should have been dismissed on that ground; and the question of the constitutionality was not the sole one before the court.

### COURAGE FOR THE CRAVEN.

This rather extraordinary overreaching of the merits in the case in order to render a decision on the constitutionality of the law does not, however, affect the worth of that decision. As the first judicial opinion on the constitutionality of any part of the great legislative mesh that has been entangling the progress of the most modern road vehicle, the decision is of peculiar value in that it illustrates how constitutionally weak are the threads of the net woven by the obstructionists. The decision is valuable in the encouragement it gives automobilists to resist the attempt that is being made to hedge them around with unreasonable legal restraints, as if they were branded criminals pictured in a rogues' gallery, who may not cross this or that "dead line" of the highway, and who are under the constant surveillance of the police.

The craven tendency on the part of motor vehicle users to submit to all the impositions of the anti-automobilists has been one of the most amazing manifestations in connection with the development of the motor car. Men of vast wealth and influence have puffed with brave talk, and yet recoiled from any actual fight for individual rights which even a petty court would declare are fundamental. The most abject cowardice has been displayed in the face of the anti-automobile sentiment, and the remark recently made by a lawyer representing a powerful body of automobilists, "We are not numerous enough

to oppose this sentiment against us," seems to have expressed the miserable fearfulness of all.

Now that one effective first blow has been dealt to the Bailey law, it is to be hoped that at least the cur courage of the wolf pack will be found in the automobilizing ranks, and that some of the organizations will leap upon the crippled statute in a body, as skulking wolves do upon a wounded creature that they dare not attack when it is in fighting form.

### U. S. CONSTITUTION THE KEY.

One of the most interesting features of the decision rendered by Justices Olmsted, Mayer and Wyatt is that which calls explicit attention to the portion of the Federal Constitution which oppressive statutes such as the Bailey law offend against. Ultimately all law is grounded upon justice, and in the final analysis the principles of equity which are patent to common sense are found to be threaded through all the skein of legal technicalities. It is without apology, therefore, that the Motor World asks of the lawyers now retained in the interests of various automobile organizations why they have not before discovered what the police court justices have promulgated, and why they do not at once go further and establish the greater unconstitutionality of the Bailey law which was diplomatically passed over by the municipal magistrates.

There is the most obvious haste manifested by the magistrates in their decision in passing over the question of the law being unconstitutional, because of discriminating against one set of those in the great class of highway users. The able but politic court document states:

"It is fundamental that a legislative enactment is not valid which discriminates between persons of the same class. It is claimed by the learned counsel for the defence that the persons of the same class in this case are all the persons who use the highway, whether operators of automobiles or persons riding or driving horses, or using any other method of locomotion, regulated by the Highway law. Whether this contention is correct is not necessary for us to determine. It is clear that all persons operating automobiles on the highway are in the same class, and the statute must therefore subject all such persons to the same regulation."

### WHAT IS A CLASS?

The haste with which this contention is put aside is suggestive of the behavior of one who in the woods inadvertently brushes against some noisome and dangerous growth.

If the pleasure drivers of the highways who go out in automobiles, behind horses or on bicycles do not constitute a class, then in the name of all the immortal lexicographers what, your honors, does constitute a class of citizens? Here we have in a colony or group on Long Island near the hotbed of automobile haters a number of citizens distinguished for their wealth, their social and political eminence. Generally they are accepted as a class in whatever capacity they may be acting. There are the Whitneys, Bostwicks, Vanderbilts, Keenes, Ripleys, et als., citizens of the United States and of New York State, and frequently spoken of as the "Meadowbrook Set." They all use the highways, and all of them use various conveyances on it, sometimes an automobile, sometimes a saddle horse, at other times a phaeton or coach or again a bicycle. Under what burlesque of justice and common sense can farmer legislators say that any one of this class of highway users is in one class while using a bicycle, or buggy, or brake, but that the same person is in another class as soon as he chooses to go over the same road, for the same purpose, to or from his home, and do so in an automobile? Can the same person while doing the same thing have all his rights under the constitution radically modified by the choice of a different vehicle as a means to an end? There is neither equity, justice, common sense nor law in such a thing. Then when this group of highway users go out in vehicles of all sorts and mingle with the masses on the common road, are not they all of a class as highway travelers under the constitution?

#### FLAGRANT VIOLATION OF CONSTITUTION.

The Fourteenth Amendment says that "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States." The whole aim and object of automobile legislation up to date has been to abridge the privileges and immunities of citizens on the highways when they seek to exercise with an automobile the same privileges in the free use of the roads which they enjoy in common with all other citizens when they use a horse and buggy, even a vicious, dangerous horse, or a bicycle, even a creaking and untrustworthy fright of a bicycle.

It is against this most flagrant and manifest infringement of the rights of citizens, which automobilists as citizens hold inherently under the constitution, that the Motor World has been from the first, and is now, implacably arrayed. From the initial legislative moves the Motor World has called

upon the organized bodies to make a man's fight for a man's rights, and for the free and untrammelled use of the highway in common with the users of all other vehicles. The Motor World says now, as it has from the first, that eventually the question will have to be fought out in the courts on the basis of constitutional rights. To temporize by seeking modified laws at the hands of the avowed enemies of the automobile is only to postpone the fight to a finish that must come. The sooner it comes the better.

#### A MOSES HAS BEEN FOUND.

Great cause for rejoicing has been found through this MacWilliam case and the decision rendered in it. It has brought to light at last one man, representing the automobilists, who believes in going to the root of the matter—one man whose speech on the subject rings true, who seeks no compromise, but asks boldly for the whole loaf that is a citizen's birthright, and proposes to fight for it all. In Charles Thaddeus Terry, the attorney for the National Association of Automobile Manufacturers, there has been found a Moses who seeks the true path, and who may yet be looked to to lead the forlornly fearful tribe of automobilists out of the wilderness of unjust legislation.

It is not only the question of licensing that requires testing, but the whole bundle of special legislation against the free use of automobiles. In his briefs submitted in the Farr and Ellis cases Mr. Terry ably attacks the whole structure, and in a manner that must crumble it when the questions reach the higher courts of justice. Some of his utterances in those briefs should be emblazoned on the facade of buildings where automobilists meet and pasted inside the hat of every man who operates a motor car. We can quote only sparingly:

#### SOME RINGING TRUTHS.

"The right to use the streets in conformity with existing laws is a natural right, and it cannot be converted into a privilege by statute.

"This natural right is inherent in every citizen, and cannot be made a matter of purchase and sale at the will of the State. His freedom to exercise this right cannot be taken away by the imposition of a tax."

The point next raised is, we believe, a new one, in respect to calling attention to the fact that the Bailey law prevents the ordinary citizen, however competent he may be, from borrowing or renting a motor car and running it, because no one can do so unless he is an owner or a chauffeur:

"It simply provides that two classes of individuals shall be given the inestimable privilege of operating an automobile, if they comply with certain regulations, to wit: Owners of automobiles and chauffeurs, or mechanics. They are obliged to pay for the privilege and put themselves to considerable, to be sure; but it is to be borne in mind that no one else in the community can obtain this privilege, even by going to that trouble and paying the fee. The statute is illogically and tyrannically discriminating and unconstitutional when it gives the right to operate automobiles to some members of the community and denies it to others, although the distinction is not based upon any reason or upon any logical principle of discrimination."

These are ringing sentences. Further on Mr. Terry raises the point that the license fee constitutes a double taxation.

#### AN OPERA BOUFFE DECISION.

In the case W. H. Ellis, Counsellor Terry submitted another brief that goes to the heart of the matter. Mr. Ellis had the distinction of being the first one in New York State who was punished under the Bailey law by being forbidden to go out in his automobile for two weeks, just as boys who tear their trousers are punished by being kept in the house. The delicious absurdity of the decision in the Ellis case has not been perceived by the daily press, apparently. It is quite as good as anything in opera bouffe. The court on the same day handed down the decisions in the MacWilliam, the Farr and the Ellis cases. In the MacWilliam decision the justices declared that the licensing provision is unconstitutional—that therefore no license is necessary in order to run an automobile. Then the same lawgivers turned and in the Ellis case confirmed the judgment passed suspending his license for two weeks: "You need no license, sir, and I suspend your license, sir, anyhow."

Oh, my! To what a state of confusion has the motor car brought the bench, the bar and the farmer legislators!

#### LET US BE FREE.

The way to end the nonsensical and tyrannical oppression of automobilists has been found. The Motor World first pointed it out, and now a court itself has pointed the way.

A man has been found who recognizes the way, and is willing to follow it. It is the only way, and the outcome is not in doubt. Smash all the oppressive legislation that is not constitutional! Let us be free men, with automobiles as with all else!

## SPAULDING IS DROWNED

**Late Head of Buffalo Concern Drives Into Erie Canal, With Fatal Result.**

Henry F. Spaulding, formerly president of the Spaulding Automobile & Supply Co., Buffalo, was the victim of a fatal accident four miles from Fort Plain, N. Y., on Tuesday last. He was driving an automobile on the towpath of the Erie Canal. Owing to the muddy condition of the path, and while turning out for a lineman's team, his car swerved more than he intended, and the man and machine plunged into the water. Two linemen rushed to aid him, but in their excitement they let go of a rope, one end of which they had thrown to the drowning man.

One of them then hastened to Spraker, a hamlet near by, for assistance, but by the time help arrived Spaulding had gone down for the last time. Search for the body began immediately, and the man's coat, which was presumably on the seat when the accident happened, was soon after found. There were papers, letters, etc., that positively identified him. Later the body was recovered, badly entangled in the rope which had been thrown to him. The automobile, uninjured and with the brakes set, was also recovered.

Besides the other papers in Spaulding's pockets was a draft for \$5,000, payable to his order. He was en route to Buffalo, and met with an accident one week ago that kept him in Amsterdam for repairs until Tuesday. Meantime his travelling companions, his wife and her mother, had gone on to Syracuse, where they were waiting to continue the journey with him. The body and the automobile were taken to Canajoharie, and relatives at various points were notified.

The unfortunate man was the head of the Spaulding Automobile & Supply Co., Buffalo, which was placed in the hands of a receiver a few months ago.

### Increased Capacity for Hartford Plant.

Work has been commenced on a three and one-half story addition to the Hartford Rubber Works, measuring 100 by 200 feet. The addition will be of brick and brownstone, and will be devoted to the production of automobile and carriage tires. The power plant of the Hartford works is also to be doubled by the installation of a new 1000-horsepower engine.

### Grieb Goes to Coffeyville.

H. C. Grieb, of Carthage, Mo., who had been carrying on a bicycle repair business at Joplin, has sold out there in order to open a garage at Coffeyville, Kan. He will have a power plant and all necessary equipment. As Coffeyville already boasts of eighteen or twenty automobiles, and expects others, the place appears to afford an excellent opening.

The first of the four-cylinder Peerless cars has been shipped to Banker Bros., New York.

## Wants Financial Encouragement

If the "proper encouragement" is given the enterprise, an automobile plant may be located at Nashville, Tenn. Tyndale Palmer, vice-president and general manager of the Union Terminal Company of New York City, has written to Mayor Head, making inquiry about the prospect for the establishment of such a plant there. He states that he is desirous of locating the plant in Nashville because it would be convenient for the Southern trade. He says that practical men are behind the enterprise, and intimates that if he is given the proper encouragement from local capitalists he will surely bring the company there.

Motor wagons for delivery purposes, both light and heavy, and various other motor machines will be manufactured should the company succeed in getting established.

Mr. Palmer has more than one string to his bow, however. He has written a similar letter to at least two other cities, viz., Dubuque, Iowa, and Chester, Penn.

### Worcester Garage Changes Owners.

The Worcester, Mass., Automobile Station 1, located at 43 Foster street, has changed hands, Thomas C. Orndorff and Harry C. Orndorff, the owners, selling the business to a newly organized company. The company has elected these officers: Asa Goddard, president; Frank L. Coes, secretary; Arthur Putnam, treasurer; John W. Harrington, Frederick S. Wilder and B. F. Blaney, of Springfield, board of directors. The station will be in charge of Blaney.

### Recent Incorporation.

Camden, N. J.—Continental Motor Vehicle Co., under New Jersey laws, with \$100,000 capital. Incorporators—Daniel M. Plantz, Henry S. Mansfield, L. Charles Bechtie, William F. Robinson and Robert C. Taylor, all of Camden, N. J.

### To Climb Louisville Steps.

On August 12 J. H. Bledsoe, of Louisville, Ky., will attempt to ascend the courthouse steps on Jefferson street, Louisville, in a Cadillac car. There are about sixty steps to climb, the landing being twenty-four feet from the sidewalk.

### Authorized Bond Issue.

At a meeting held last week the directors of the International Power Vehicle Co., Stamford, Conn., authorized an issue of \$250,000 first mortgage 5 per cent twenty-year gold bonds for the purpose of increasing the capacity of the plant.

### Cape Town Merchant Coming.

R. B. Tyre, the head of R. B. Tyre & Co., Cape Town, is due in this country early next month, bent on securing the agencies for several American cars. His firm maintains branches in several towns in Cape Colony.

Sutcliffe & Co., Louisville, Ky., have been forced to ask their creditors for an extension. The concern is a mail-order house which recently began to handle automobiles.

## TO ASSESS STOCKHOLDERS

**Trustee of Embarrassed Remington Concern Begins Suit for Unpaid Subscriptions.**

Stockholders of the bankrupt Remington Automobile Company, of Utica, N. Y., are much disturbed over a new turn the affairs of the company has taken. It has been rumored for some little time that proceedings would be instituted against them to compel them to pay their stock subscriptions. This turns out to be true.

L. N. Southworth, the trustee in bankruptcy of the Remington Automobile Company, has begun a proceeding in the United States District Court to compel stockholders of the company to pay in their stock subscriptions. The suit is returnable before Judge Ray on October 6, and the indications are that it will be hotly contested. The proceeding is to have the court levy an assessment against the stockholders, and if the amounts are not paid then suit will be brought in the name of the trustee. It is stated that the liabilities of the company over all assets are about \$42,000, and this amount the stockholders will have to make good if the present proceeding is successfully maintained.

### Autocar Makes an Addition.

Successive additions to the plant of the Autocar Company, Ardmore, Penn., have exhausted all the land owned by the concern. The demand for greater facilities is still pressing, however, and a plot of adjoining land has been leased. Upon it a large wing connecting with the present plant will be erected.

### Takes Sons Into Partnership.

Henry P. Jones, trading as Phineas Jones & Co., Newark, N. J., has admitted his sons Phineas and H. Percy Jones to partnership in the business of manufacturing automobile and other vehicle wheels; the style of the firm will remain unchanged.

### New Model for Studebaker.

A four passenger electric vehicle will be placed on the market by the Studebaker Bros. Co., next year. There has been so much call for a vehicle of this type that designs for it have already been prepared.

### Assignment for Jones-Corbin.

The Jones-Corbin Co., Philadelphia, has made an assignment for the benefit of its creditors. An attachment for \$10,000 had been served on the concern previously, and this undoubtedly hastened the assignment. The concern was a new one, and made a gasoline runabout.

### Old Company is Dissolved.

Now that the Regas Automobile Company, of Rochester, N. Y., has been incorporated, the Regas Vehicle Company is being wound up. A certificate of voluntary dissolution has been filed with the Secretary of State.



# The Tour that Stands f

**T**HE now completed cross-continent tour by that eminent surgeon, Dr. H. Nelson Jackson, was quite unlike any undertaking of the sort ever attempted: It was not a trade enterprise. It was undertaken for pleasure, not for profit

or publicity. The Doctor was not seeking advertising for anyone.

Dr. Jackson was not in the employ of any one connected with the automobile industry, nor was he paid to attempt the ocean-to-ocean journey. It was not an "inspired" task, nor did the good Doctor travel in company with a "press agent" or a factory expert; nor did a factory expert follow him by train to render assistance when assistance was required. Repair stations equipped with duplicate parts were not established for him and were not at his command. He selected his own car, was accompanied by a companion of his own choosing, Sewell K. Croker, drove the car himself, carried but one extra tire and four extra spark plugs, paid his own bills, followed his own route and was subject to no one's commands. He was wholly disinterested from a trade standpoint, and had the reputation of no car or the advertising of it in mind.

Dr. Jackson's successful undertaking, therefore, "stands for something." It teaches a lesson—conveys a moral. It shows what a good man with a good car can do when he sets out to do it. It proved that there is one dependable car—one that even for the most trying journey need not be "kept in touch" with the factory that produced it.




IF YOU ARE INTERESTED IN AMERICA'S STAND

## THE WINTON MOTOR

Factories and Head Office:

# or Something and Why



**D**R. JACKSON drove a regular model Winton car, purchased by him from a private owner in San Francisco, at a premium over the regular purchase price of \$2,500. When he arrived at Cleveland (only 700 miles from New York) the motor was in such splendid condition that he refused to let it go into the Winton factory for a "looking over." It had gone up and over the High Sierras, traversed the Great Desert (a feat never accomplished by another automobile), climbed the rugged ascents and threaded the dangerous passes of the Rocky Mountains, rolled over the plains of Nebraska, ploughed through the black mud roads of Iowa and continued on through Illinois, Indiana and Ohio, but the motor was in such condition when Cleveland was reached that no factory inspection was necessary.

This record is the more remarkable when it is considered that no factory mechanic accompanied Dr. Jackson, and that he had no system of relays for duplicate parts, tires or other supplies along the route.

Dr. Jackson left San Francisco May 23, going north through the picturesque Oregon country, and thence east over the Great Desert, arriving in New York July 26th, having made a total mileage of about 6,000 miles, at an average speed of over 100 miles per day, although the Doctor made no attempt at a speed record.

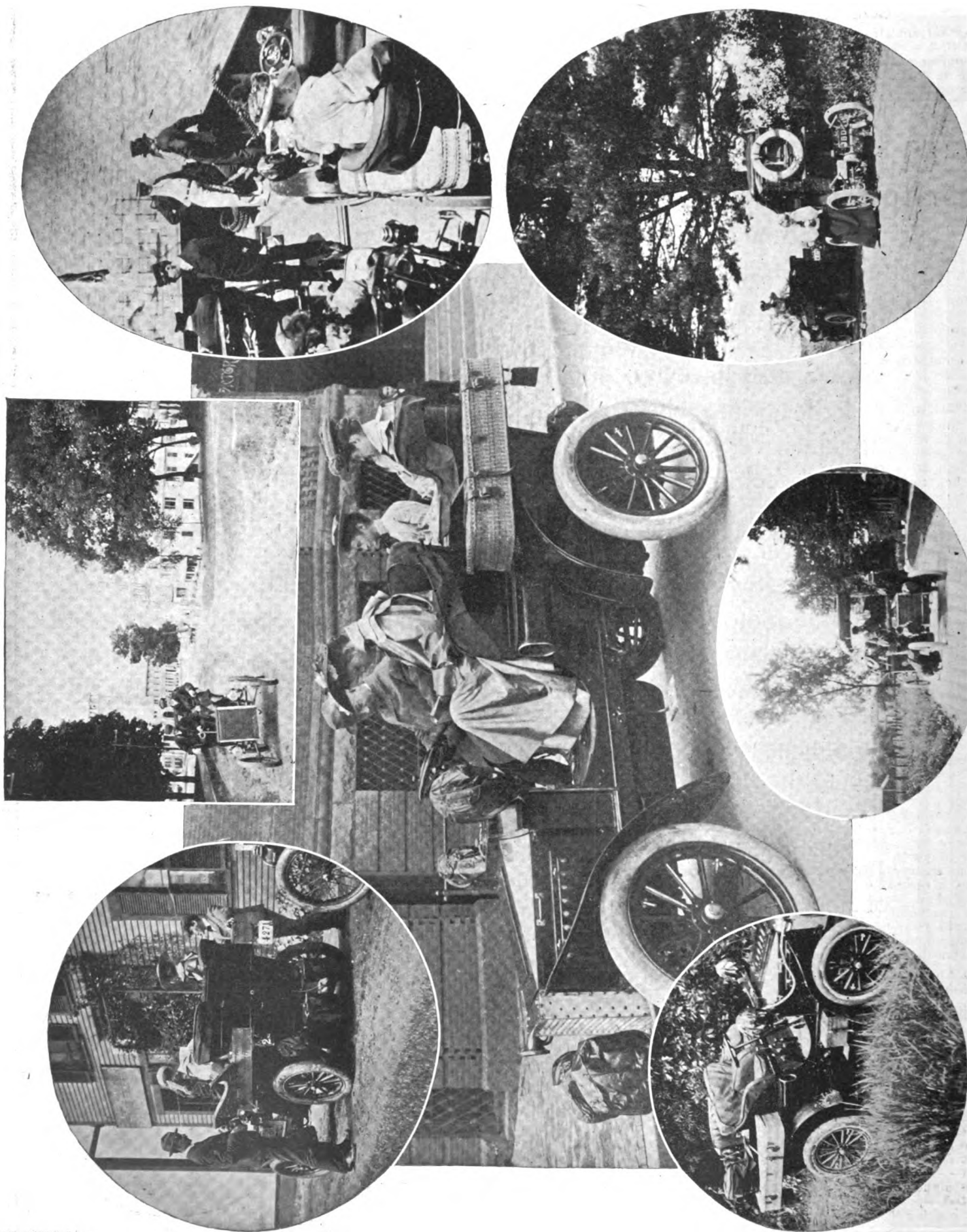



RD HIGHEST GRADE CAR, SEND FOR CATALOG.

**CARRIAGE COMPANY,**  
CLEVELAND, OHIO, U. S. A.







JAMES B. DILL'S RANGELEY LAKE PARTY AND SCENES EN ROUTE

## ENDURANCE TEST NO PLEASURE JAUNT

(Continued from page 735.)

testant shall report to the official weigher with his car equipped exactly as it will compete in all sections of the test. It shall be necessary for the car to conform in all respects to the description given at the time of entry. The official weigher, having made a record of the weight of the car, shall attach a seal. Without the seal no car shall be allowed to start. Each contestant shall obtain from the weigher a badge for himself and for one passenger, if one be carried, said badge or badges bearing the number of his car, which badge or badges shall be worn conspicuously during the contest; two banners and two numbers, which must be attached to the car.

Ballast, if any be carried, shall also be weighed and so sealed that the weigher can identify it at later stages of the contest. He shall make a record of such ballast, or if passengers only are to be carried make note of that fact.

On the morning of the start and each morning thereafter he shall examine the ballast and satisfy himself that it has not been changed.

## 7—THE RUN.

The run shall start at 7 a. m. on October 7. Each contestant shall be credited at the start with 3,000 points, representing approximately the number of minutes required to cover the full distance at legal speed. From this number shall be deducted one point for each minute or portion thereof a car is at rest, no matter what the cause, except as hereinafter specified.

Should it be necessary for a car to stop while nearing an official garage by reason of pressure of cars ahead, and for no other reason, the fact shall be noted by the observer, but there shall be no forfeiture of points. The cars shall fall in line on the right side of the road, no car overlapping the one ahead.

One stop, not to exceed one hour, shall be permitted for luncheon without penalization, the observer, meanwhile, never to be out of sight of the car.

There shall be no penalization for unavoidable stops to avoid frightening horses, traffic, demands of nature, to render assistance in case of accident to other cars or drivers of horses, or to light lamps. In all these cases, motors shall be allowed to be stopped, provided there shall be no flagrant violation of the rules.

To secure a perfect score it shall be necessary for a car to make the entire journey under its own power. If at any time a car shall proceed without any part of its load, a record of the time such load is absent shall be taken by the observer, and the car shall be penalized as if stopped. Should a car be towed or pushed, the time occupied in such towing or pushing shall be considered as a stop.

## 8—BRAKE TESTS.

Brake and hill climbing tests shall commence at 9 a. m. on October 15. Each contestant shall report to the official measurer, with his car equipped exactly as it competed in the run, and with its extra parts, supplies and ballast on board.

To secure a perfect record in the brake test, a car shall demonstrate to the satisfaction of the referee its ability to stop within \_\_\_\_\_ feet, in a speed of \_\_\_\_\_ miles an hour. A perfect record shall entitle a contestant to 250 points. For each foot or fraction thereof in excess of the said \_\_\_\_\_ feet required to bring a car to a standstill \_\_\_\_\_ points shall be deducted.

In making the stop a car shall not be permitted to deviate more than three feet on

either side from the direct course in which it has been travelling.

To secure a perfect score in the hill climbing tests, a car shall demonstrate to the satisfaction of the referee its ability to climb a distance of \_\_\_\_\_ feet in \_\_\_\_\_ minutes, on an average grade of \_\_\_\_\_ per cent, flying start of 200 feet being permitted; to back fifty feet, come to a standstill, and then move forward fifty feet, all on an average grade of \_\_\_\_\_ per cent. A perfect score shall entitle a contestant to 250 points. The following penalties shall be enforced: For each stop, 20 points; for each five seconds or portion thereof in excess of the said \_\_\_\_\_ minutes required to complete the distance, one point; for failure to back the required fifty feet, 50 points; for failure to start on the grade and complete the required fifty feet, 50 points.

No change of sprockets or gears for hill climbing or for any other purpose, except repair, shall be permitted. In case of replacement the sprocket must be of the same size.

## 9—WEIGHT CARRYING CAPACITY.

Except that each car must carry an observer, the number of passengers shall be optional. A record shall be made of the weight carried either in passengers, including the operator and observer, or ballast, exclusive of personal baggage and extra parts. At the finish of the run each car which shall have carried a load equal to 30 per cent or more of the weight of the car shall be credited with 1,000 points, and cars whose loads shall have been less than 30 per cent in proportion. Operators, passengers and observers shall be assumed to weigh 150 pounds apiece, but there shall be no obvious variation from that weight. Vehicles shall be equipped with all of the seats usually carried. One passenger only (hereinafter described as the mechanic) shall be permitted to render assistance in the matter of repairs, but only to the car on which he is actually travelling and in the presence of the observer.

## 10—CONDITION AT FINISH.

Immediately on completion of the run, hill climbing and brake tests each car shall be placed in the official garage in exactly the same condition as it finishes, and there left for official inspection. The inspection shall be made by a board of examiners consisting of not less than three disinterested engineers, whose duty it shall be to make a record, based on the evidence before them and the reports of the observers, of the condition of each car. The board shall note especially replacements, and the character of the assistance rendered the operator in making repairs. The board shall also take cognizance of the cost of parts replaced in proportion to the cost of the car.

The board of examiners shall accept as the standard of excellence the car which it finds to have been least affected by the test, and shall be entitled to discard as not entitled to any award any and all cars which in its judgment are not in fit and safe condition for continued use without extensive repairs. The necessity of replacing tires shall not be considered an extensive repair in this connection.

The board shall divide the cars into as many classes as it shall consider necessary, and shall make a written report of the condition of each car, with special reference to such deterioration as it seems to have suffered as a result of the test.

The following points shall be awarded, according to the findings of the board of examiners: To vehicles of the first class, 1,500 points; second class, 1,250; third class, 1,000; fourth class, 900; fifth class, 800; sixth class, 700; seventh class, 600;

eighth class, 500; ninth class, 400; tenth class, 300.

(Note—This examination will occupy several days. Arrangement must be made to leave the cars at Pittsburg until the completion of the report. The cars will be in charge of a watchman, but insurance, if desired, must be secured by the owners.)

At the close of the test each contestant shall furnish the board of examiners a list of prices of parts needed for replacement during the test, at which prices they shall guarantee to supply the said parts to owners of their machines at any time within six months. In the event that the contestant is not a manufacturer, he must furnish a list with the maker's guarantee attached.

## 11—START OF THE RUN.

Operators shall report to the starter not later than 7 a. m. on October 7. The cars shall be started thirty seconds apart, as nearly as possible in the order of their arrival on October 6. After the first morning no restriction shall be placed on the time a car may start within the hours the garage is open (6 a. m. until noon), except that the hour shall not be earlier than 7 a. m. without the consent of the observer.

## 12—ENTRIES.

Entries shall be made upon blanks supplied by the association, which blanks shall be filled out by the entrant in every detail and show the following: Name of machine; name of manufacturer; place of manufacture; retail selling price; weight of vehicle with tanks filled and complete equipment; water and gasoline capacity; number of passengers ordinarily carried; number of cylinders; bore and stroke of engine; arrangement and location of engine; whether two or four cycle; revolutions per minute at twenty miles per hour; size of wheels; wheel base; form of ignition; make, size and retail price of tires and whether single or double tube; list of special lubricating and other devices included in retail selling price.

The entry fee shall be \$25 for each vehicle, and shall accompany the entry. No entry shall be received unless accompanied by the fee. Each entrant shall also furnish one official observer, whose expenses he must defray throughout the test, for each of his entries, and shall be responsible for the performance by said observer or observers of the duties hereinafter prescribed. The name and address of the operator and observer shall be given at the time of entry, but a change may be made, if necessary, at any time before 6 p. m. on September 29.

In the event of a vehicle being disqualified or failing to take part in the contest, the entry fee shall be retained by the association.

There shall be no limit to the number of vehicles which may be entered by any manufacturer, agent or owner.

The association reserves the right to refuse any entry without assigning a reason. Entries shall be made, by mail or in person, at the office of the association up to 4 o'clock p. m. on September 22. An entry tendered either in person or by mail or telegraph later than the time herein set for the closing of entries, or unaccompanied by the entry fee and by all of the details asked for in the entry blanks, shall be rejected.

By his signature to the entry blank a contestant shall acknowledge that he is acquainted with and fully understands the rules of the contest, and that he agrees to abide thereby.

## 13—OBSERVERS.

Each competing car shall carry an official observer, whose duty it shall be to act

strictly in accordance with these rules and those hereinafter provided for his guidance. Observers will be changed daily, and under no circumstances shall an observer be permitted to ride upon a car made, owned or for the time being controlled by the entrant by whom he is nominated.

It shall be permissible for the operator to call upon the observer to render any reasonable assistance within his power only while the vehicle is actually at rest.

#### 14—NUMBERS.

Each competing car shall have securely and conspicuously attached thereto, on both front and rear, or both sides, an official letter and number corresponding with that given in the catalogue, which numbers shall be obtained and applied immediately after weighing and sealing on October 6. Cars shall be numbered in the order of receipt of entry.

#### 15—GARAGES.

An official garage shall be established at each night stop, at which each car shall be placed in charge of the superintendent of garages. After entering the garage the operator may do nothing more to his car, without penalization, than shut off the gasoline, water current and lubrication and fill tanks.

It shall be permissible for an operator or mechanic, or either of them, to enter a garage when accompanied by their observer, but not otherwise. An observer shall not be required to remain in a garage more than fifteen minutes after arrival.

The site of a garage will be designated by a red flag, with the word "garage" prominently printed thereon. A green flag shall be placed a quarter of a mile in advance of each garage.

No car with a lighted burner or lamp shall be permitted to enter a garage, nor shall smoking or the use of fire for any purpose whatsoever be permitted therein.

Contestants, mechanics and observers shall be required to exhibit their badges to the superintendent of garages or his assistant in charge of the entrance in order to gain admittance.

#### 16—OBSERVANCE OF LAW.

Operators shall conform in all respects to the laws of the States in which the contest occurs, to the rules and regulations of local officials and to the rules of the road. Infractions of the law shall be carefully noted and recorded by observers. Wilful disobedience of this rule shall result in summary disqualification.

Running with open mufflers shall be penalized at the rate of one point per minute or fraction thereof.

(A synopsis of the laws of New York, Pennsylvania and Ohio, together with general observations relative to conduct on the road, will be found on page —.)

#### 17—TIME AND SPEED.

No cognizance shall be taken of time or speed unless it shall be shown by an observer that there has been wilful infraction of the law, the penalty for which shall be immediate disqualification.

#### 18—TIRES.

It shall be compulsory that the same make and style of tire shall be used throughout the journey. In case of tire deflation it shall be compulsory to stop and make a repair, unless the damage shall be such that it cannot be repaired by the use of ordinary roadside facilities, which fact shall be fully reported by the observer.

It shall be permissible to replace, instead of repair, inner tubes, but these shall be charged as an item of expense of repair by the board of examiners, unless repaired and used before the end of the test.

#### 19—OFFICERS.

The officials of the test shall be:

A board of examiners of three members;

A referee;

A starter;

A timer, a measurer, a weigher and a superintendent of garages, all with the necessary assistants;

A superintendent of observers;

An observer for each competing car.

Their respective duties shall be as follows:

#### 20—BOARD OF EXAMINERS.

(See Rule 10.)

#### 21—REFEREE.

It shall be the duty of the referee to exercise general supervision of the affairs of the test, to enforce strict observance of the rules, and to pass upon all questions which, in his judgment, are covered by these rules in which an immediate decision is necessary.

He shall carefully observe the conduct of contestants, observers and others, interpret rules and issue warnings, in case it shall become necessary.

In the event of wilful infraction of any rule by a contestant, being proved to his satisfaction, it shall be his duty to disqualify the vehicle against whose operator the charge is proven.

All questions which do not require immediate decisions shall be referred by the referee to the management as promptly as may be possible after the close of the run.

It shall be the duty of the referee to certify that the performance of each car in the hill climbing and brake tests is made in strict accordance as to time and measurements with the provisions of the rules governing this feature of the tests.

#### 22—STARTER.

It shall be the duty of the starter to report at the starting point at 6:30 a. m. on October 7, prepared to start the contestants. He shall start them at intervals of thirty seconds, as nearly as possible in the order of their arrival at the weighing place on the previous day. He shall report at the association's headquarters at the place selected for the hill climbing and brake tests at 8:30 a. m. on October 15, there to start the contestants under the direction of the referee.

#### 23—TIMER.

It shall be the duty of the timer to report at the association's headquarters at the place selected for the brake and hill climbing tests promptly at 8:30 a. m. on October 15, prepared to time the contestants.

He shall report the time to the referee, or to such other persons as may be appointed by the referee to receive them.

#### 24—OFFICIAL MEASURER.

It shall be the duty of the measurer to report at the association's headquarters at the place selected for the hill climbing and brake tests at 8:30 a. m. on the morning of October 15, accompanied by not less than three assistants, and there to make the necessary measurements and a record of the performances of the cars.

#### 25—WEIGHER.

The official weigher, with his assistants, shall report at Garage No. 1 at 8 a. m. on October 6, provided with a complete set of seals, two banners and three numbers for each vehicle, a set of official badges for operators and mechanics, a sufficient number of copies of all printed matter and of maps, issued by the management, to supply all contestants, and a book, or books, prepared to record the number, weight and weight of ballast of each car or the number of passengers carried.

He shall weigh and examine the cars in the order in which they are reported to him by the superintendent of garages. He shall satisfy himself that each car conforms in all respects to the description given in the entry blank, and, having done so, shall attach the official seal to some immovable part of each car, which complies with the requirements, and to no others. He shall instruct contestants relative to the attachment of flags and numbers, and furnish them with one official badge for each operator and one for a mechanic, provided one is to be carried.

He shall assist the superintendent of garages, so far as may be necessary, in preventing changes of any character in any of the cars, and shall each morning assure himself that there has been no change in ballast or passengers.

#### 26—SUPERINTENDENT OF GARAGES.

It shall be the duty of the superintendent of garages to report at Garage No. 1 at 8 a. m. on October 6, and to be constantly on duty, in person, or by at least one assistant, at the garage for the time being in use without intermission until notified by the chairman of the board of examiners that their work has been completed. Thereupon he shall give notice to the entrants or such other persons as they may have designated to represent them, that the cars may be removed, forty-eight hours being allowed for such removal.

He shall record the order of arrivals of cars at Garage No. 1, and shall see that they are reported to the weigher in their proper order.

He shall assign a position to each car as it arrives at a garage, and see that at no time shall any car, its equipment or extra parts carried be taken from a garage, except when the operator or mechanic is accompanied by his observer.

Garages shall close at midnight and reopen at 6 a. m. Any car failing to report at a garage by the closing hour shall be penalized 360 points, representing the six hours between the closing and opening times. The garages shall close at noon.

On October 15 he shall pass the cars out, as nearly as possible in the order of their arrival on the previous day, commencing as soon after 8 o'clock as possible, but only so fast as the officials of the hill climbing and brake tests advise him that they are ready. On the return from the hill test he shall admit only operators, accompanied by their observers and mechanics, or either of them, and shall see that all persons leave the garage within ten minutes after their arrival.

It shall be his duty to enforce the rule relative to smoking and the use of fuel in garages.

Under no circumstances shall he admit any one except operators and one mechanic for each car, or either of them, accompanied by their observer; the weigher and his assistants, the board of examiners, the referee, the starter, the superintendent of observers and the press agent to any garage unless supplied with the necessary authority from the president or general manager of the associations. The persons referred to shall identify themselves by badges provided for the purpose.

He shall record the arrivals at and departures from garages, and shall report to the management as promptly as may be possible the failure of any car to reach any of the stopping points. It shall be his duty to see that he or his assistants shall be constantly on duty, and that garages are closed promptly at midnight and reopened at 6 a. m., and finally closed at noon each day.

**27—SUPERINTENDENT OF OBSERVERS.**

It shall be the duty of the superintendent of observers to report at the headquarters of the run at 7:30 p. m. on October 6, prepared to give final instructions to observers and contestants relative to the rules of the contest, and to make the allotment of observers for the first day of the test.

It shall be his duty to follow the work of observers with the greatest care, to give them any necessary instructions from time to time, and to receive from them at the close of each day their reports for the day, ascertaining that the record has been made complete before acceptance.

He shall each day make assignments of observers for the following day, and record them in a book kept for the purpose. He shall post in a conspicuous place a copy of the record, so that operators may inform themselves relative to their observers for the following day.

He shall keep a book in which operators shall record each evening the time at which they desire to start next morning, which record shall be open to the inspection of observers, so that they may be informed on this point.

It shall be his duty to immediately remove any observer who may be guilty of neglect of duty or who fails to observe the rules of the contest and those made for the government of observers in every detail, and to supply a substitute.

**28—RULES FOR OBSERVERS.**

An official observer shall be assigned to each competing car by the superintendent of observers each evening, commencing on October 6. No observer shall be permitted to travel upon any one car for more than one day, or at any time upon a car owned or controlled by the entrant by whom he was nominated. A bulletin issued each evening, showing the assignments of observers for the following day, may be inspected at the association's headquarters each evening thereafter.

Each observer shall obtain at the association's headquarters on the evening of October 6 and each evening thereafter a badge, whose number shall correspond with the number of the car in which he is to ride the following day. This badge shall be worn conspicuously during the ride, and it shall be surrendered to the superintendent of garages at the association's headquarters each evening. Under no circumstances shall the badge be surrendered to any other person except in case of sickness, and then only as hereinafter provided.

It shall be the duty of the observer to report, even to the minutest detail, every incident of the run which may have any possible bearing on the performance of a car or its condition at the close of the test, with special reference, however, to the following details: Stops, the cause of each stop, duration of each stop, repairs, replacements and adjustments. It shall also be his duty to report whether, in his opinion, repairs are made rapidly or otherwise, and by whom they are made.

Each morning the observer, in company with the operator of the car in which he is to ride, shall proceed to the garage, and thereafter shall not leave the car, under any pretext whatever, until it is placed in the garage at the night stop. He shall see that the operator and his mechanic leave the garage with him, and that nothing is done to the car within the confines of the garage without being timed for penalization, except turning on or off the fuel and water supply current and lubrication.

He shall take particular care that no attention whatever is given to a car except in his presence.

He shall prevent, as far as may be in his

power, any infraction of the law, the rules of the road, the regulations of local authorities and the rules of the contest, and duly report any which may be attempted, whether the attempt be successful or not.

Observers shall not be permitted to record or make a report, official or unofficial, of the running time on any section of the journey to any one except in case of infraction of the rules, and then only to the referee, or to report any of the incidents of the run except to the management upon the report sheets furnished for the purpose.

Every observer shall attend a meeting to be held at 8 o'clock on the evening of October 6 for instructions and a thorough discussion of the rules. The roll will be called.

In the event of such serious indisposition as renders it imperative for an observer to leave a car, he shall turn over his badge and record sheet to one of the passengers, if any there be, or if there be none, to the operator. The person to whom the record is surrendered shall continue it until the arrival at the next garage, when a new observer shall be appointed. In such event the passenger or operator shall be required by the management to make an affidavit of the correctness of the record.

Should a vehicle become disabled and for this or any other reason abandon the contest, the observer shall proceed to the next stopping place, and there deliver his record to the superintendent of observers.

Observers' reports must be delivered to the superintendent of observers in charge at each night stop.

Observers shall report for duty at 7 a. m. on the morning of October 7, prepared for the start of the run, and thereafter at any hour, not earlier than 7 a. m., selected by the operators of the cars in which they are to ride. Observers shall be entitled to insist, if necessary, on a stop of one hour for luncheon.

Should an observer fail to appear at 7 a. m. on any day of the test, the contestant shall be entitled to secure from the superintendent of observers a substitute, whose expenses shall be paid by the entrant by whom the delinquent observer was nominated.

In case of doubt as to the meaning of any rule, it shall be the duty of the observer to make a full record of the facts which gave rise to such doubt and to consult the superintendent of observers at the earliest opportunity.

**29—CERTIFICATES.**

Certificates shall be awarded according to the following plan:

Each certificate shall set forth the name, price, name of maker, entrant, weight of car, number of passengers carried; the make, size and retail price of tires used, and whether single or double tube and the number of points scored for each feature of the contest.

That vehicle in each class which secures the highest number of points shall be accepted as the standard of excellence in its class and shall be rated 100 per cent; all cars whose scores are between 91 and 100 per cent inclusive, shall receive first-class certificates; those whose scores are between 81 and 90 per cent, inclusive, second class certificates; those whose scores are between 71 and 80 per cent, inclusive, third class certificates.

**30—OFFICIAL REPORT.**

There shall be published, in addition to the issuance of certificates, an official report of the performance of each car which finishes the run, which report shall contain the details shown on the certificate, the reports of observers, the total cost of repairs, and the report of the Board of Examiners.

**31—REPAIRS.**

Under no circumstances shall an operator or any other person make, or attempt to make, any repair or replacement or do any work upon a competing car in the absence of the official observer, nor shall it be permissible to call to his assistance any other than local repair shop facilities. The assistance of expert repairmen, travelling by train or otherwise, is strictly forbidden. No replacement shall be made, except of tires, except of such extra parts as are carried on the car or obtainable at local repair shops.

There shall be no restriction placed upon the quantity of extra part or supplies, a machine may carry.

**32—ASSISTANCE OF OBSERVERS.**

It shall be the duty of each operator to furnish every facility necessary to the preparation by the observer of a complete report in strict accordance with these rules and those laid down for the observer's guidance, which are apart hereof, and equally binding on contestants.

33—It shall be the duty of contestants and observers to report to the referee any infraction of these rules which may come under their notice by the operator or observer of any other car.

**34—THE ROUTE.**

There shall be deviation from the course under any pretext. Should local conditions render any change of route described in the official programme necessary, due notice of the fact shall be given to contestants before the start on that particular portion of the journey.

**REPAIRS WHILE IN MOTION.**

No filling of tanks or repair shall be permitted while a car is in motion.

**35—BANNERS.**

Each car shall be required to carry two banners bearing its name, which banners will be supplied by the Association. No advertising matter, except the banners provided by the Association, shall be attached to any competing car.

**36—TEST OF ENGINES.**

After the trial, the bore and stroke of the engine of any car may be checked by the board of examiners upon the written request of three operators, and if found incorrect, the penalty shall be disqualification.

**37—CHANGE OF OPERATORS.**

It shall be permissible for the operator of a vehicle to be changed at the end of any day's run, or at any time in case of indisposition or accident.

**38—STARTING HOUR.**

Operators shall record with the superintendent of garages, each evening, the hour at which they desire to start next morning, so that the observers may be fully informed.

39—NOTE:—(The route will be carefully and thoroughly marked by means of arrows or other suitable signs of confetti liberally distributed by a pilot car. Turnings will be indicated by liberal supplies of confetti, and that there may be no misunderstanding, smaller supplies will be distributed on straightaway roads at intervals not to exceed 200 yards).

The Association will make arrangements for an adequate supply of gasoline and water at each garage.

**40—SUBSTITUTE FOR OBSERVER.**

Competitors failing to supply official observers shall not be permitted to take part in the test. Should it become necessary to supply a substitute the cost shall be borne



by the contestant whose observer is delinquent.

#### 41—REPAIRS AT GARAGES.

All repairs, replacements, adjustments, or matters of any character whatsoever requiring a stop, whether performed within a garage or elsewhere, shall be timed and recorded in detail by the observer and charged against the car, except that tanks may be filled at each night's stopping place without penalization.

#### 42—DISQUALIFICATION.

Disqualification means that on notice of disqualification being served on the operator, a car shall cease to take part in the test and shall not receive a certificate, or being mentioned in the record.

#### 43—DISPUTES AND CHANGES.

Any dispute concerning the interpretation of the rules shall be subject to the decision of the Association, whose decision shall be final. The Association reserves the right to alter or amend these rules in such manner as may be deemed expedient at any time prior to the start of the contest.

#### From Duluth to Minneapolis.

Fording swollen rivers, ploughing through muddy roads and climbing sandy hills, Asa Paine and F. E. Dickinson of Minneapolis, made an automobile run from Duluth to that city last week, which was the first one ever made between the two points. The distance is only a little more than two hundred miles, and the actual riding time was but 17 hours and 25 minutes, but the journey, which began July 31, did not end until the morning of August 8.

The automobile was a sixteen horsepower Winton, and it was brought through without breakdown or accident. Rain, which fell in torrents, forced a stop at Pine City, where the automobile was stored for two days. Shortly after leaving Duluth the tourists found the bridge over Kettle River washed out, and they forded the stream with the vehicle. A block and tackle arrangement, rigged to a team of horses, was intended to pull the car through, but the heavy Winton went down the steep bank all right and made the ford without the aid of the horses. In fact the line fouled at the beginning and was useless. The stream was shallow, with a solid bed, and the car ploughed through the water and ran easily up the other bank.

After leaving Pine City the roads found were the worst imaginable. They were full of deep ruts and covered with a thick loam. Brush, stumps and sometimes fallen trees blocked traffic. Often the tourists found it necessary to take an axe and chop their way through. At one stage of the journey it required five hours to cover less than nineteen miles. The average speed for the entire run was about twelve miles an hour.

#### Just a Family Tour.

Dr. F. A. Walsh and Mrs. Walsh, of Erie, Penn., returned last week from a five hundred mile automobile tour in Pennsylvania. They had been gone two weeks, and report that the tour was made over good roads and without any accidents. They went to Chautauque Lake via Ripley, and turned south into the Allegheny River valley and mountains. They averaged 120 miles a day for three successive days.

## THE PACKARD TOURISTS

### Fetch and Krarup Receive Kindly Welcome at Des Moines and Chicago.

E. T. Fetch and M. C. Krarup, the Packard transcontinental tourists, are now to the east of Chicago, having left that city for New York on Tuesday. As reported in last week's issue of the Motor World, they had reached Adair, Iowa, on the evening of the 3d inst., burdened with evidence of the pasty condition of the roads.

Des Moines was reached on the day following. This stage of the journey was made over roads that were rough when they were not muddy. It was unmarked by incidents, but the travellers noted the fact that while the people west of Iowa treated them very courteously there was a change in sentiment as they came eastward. The salutations of the automobilists were not always returned in a complimentary manner. Amends for this lack of courtesy were made by the motorists of Des Moines, who met the tourists ten miles out of that city and escorted them in.

Very reluctantly Messrs. Fetch and Krarup had to accept the cordial hospitality of their friends in Des Moines until the 7th inst. They would gladly have foregone it in order to continue on their way, but rain compelled them to laff of the road. It rained torrents almost, and to move meant endless trouble on soft roads, with possibly something more serious as all the roads were reported washed, and even the railroads suffered.

Resuming their journey on the 7th inst., the tourists made ninety-three miles over roads which were drying, but were rough. Two hours were spent in Cedar Rapids, enjoying the hospitality of a friend. At Mechanicsville they were arrested on a trumped-up charge, and settled the matter rather than wait to fight it. They arrived at Marengo, Iowa, without other incident than trouble with poor gasoline and being obliged for the first time to grind the exhaust valve. Wheatland, Clinton, Dixon and St. Charles were next points touched, and on Monday last the travellers reached Chicago, having been met at Oak Park by a large delegation from the Chicago Automobile Club.

#### Erie Man's 1,500 Mile Jaunt.

C. R. Dench, an Erie (Penn.) real estate dealer, is now well advanced on a tour of some fifteen hundred miles through New York State and Canada. He left Erie on August 1 in an Olds touring car, accompanied by his wife and family, and expects to be gone about a month.

The route arranged, which is, of course, subject to alteration, was straight north to Buffalo and Niagara Falls, then across Lake Ontario to Toronto, where Mr. Dench has relatives. From Toronto the party will continue along the northern shores of Lake Ontario to the Thousand Islands, where they will spend a few days touring the dis-

trict. If everything is favorable the tour will be extended to Montreal, and, after crossing the St. Lawrence River, south to the Adirondack country. From the Hudson River at Albany the party will turn homeward, and will be again in Erie about September 1.

#### A Belated Report.

An exhaustive but much belated report is that of the contest committee of the Automobile Club of America on the commercial vehicle contest held on May 20 and 21 last. The report is now in press, advance copies having been sent out last week.

The report is a well printed pamphlet of eighty-eight pages, and contains, besides the rules and results of the competition, a cut and a detailed description of each of the competing vehicles. The performance of each vehicle is discussed in detail, and then is summarized and analyzed to show the average speed, cost of fuel, work performed, etc.

Tables of weights, loads, weights per horsepower, ratio of paying load to weight of vehicle and of work performed are given, but no general comparisons of general efficiency, fuel consumption, proportion of stoppages, etc., although these are figured for each vehicle separately.

#### Congressional Automobilists.

Congressman J. C. Sibley, of Pennsylvania, with Congressmen Joseph G. Cannon, of Illinois; Vreeland, of Salamanca, N. Y.; Emerson of Glens Falls, N. Y., and Hemingway, of New York City, as guests, left Mr. Sibley's summer home at Valcour, N. Y., last Thursday morning to cross Lake Champlain to Burlington, Vt., whence they started on a week's automobile tour, to end at Mount Washington. All are enthusiastic automobilists.

For the accommodation of his party Mr. Sibley had sent his two automobiles to Burlington in advance. They are a 20-horsepower Winton and a 12-horsepower Packard. An experienced chauffeur operates each.

#### A Trip Through New England.

A successful long tour in a Locomobile survey made by the Locomobile Company of America was completed on Wednesday, August 5, by Mr. and Mrs. Edmund Dwight, who arrived in New York City on that day, having covered 618 miles in their journey from Portland, Me.

The tour was a roundabout one, made for the sole object of seeing the country. The route took in Portland Springs, a general tour of the White Mountains, visits to Woodstock (Vt.), Manchester and Saratoga Springs and the run from Saratoga to New York City.

#### Automobile Party Robbed.

Near Waterbury, Conn., recently a party of automobilists hailing from Rochester, N. Y., and including William B. Armstrong, Eugene E. Hall, George L. Eaton and Colonel Frank Albright, were held up by masked robbers, who had made their victims hand over about \$40 when the approach of another party interrupted the seance.



## THE OLDS TRANSCONTINENTAL PARTY REACHES DENVER—TYPICAL SCENES IN NEVADA AND UTAH.



Denver, Col., Aug. 7.—The Olds transcontinental tourists, Whitman and Hammond, reached here to-day, after a wearying and lonesome trip of eight days from Ogden, Utah. The arrival at the latter place, after an arduous ten days' run through the Great American Desert, in Nevada, was supposed to mark the most difficult part of the trip; and perhaps it was. But the journey to Denver was but little behind it.

At Ogden a good rest was taken, for the purpose of cleaning the Oldsmobile and reviving the drooping spirits of the two ad-

venturers, and, as the cheerful Whitman put it, "to comb the sagebrush out of our hair." The trip across desert and mountains was one long succession of obstacles encountered and surmounted. There were struggles up deep ravines and laborious dragging of the vehicle through the drifting sands of Nevada.

On the run from Ogden to Denver, which was reached at 3 p. m. on August 7, the tourists had to cross some of the streams on railroad bridges and camp at section houses. Sometimes they got a meal from the railroad eating cars for construction crews; occasion-

ally they had to skip a meal. Once they lost their way and had to sleep under a sagebrush, with the howling wolves around them for company. "If anything will make a man homesick, it is a night on the desert, far from water or life, with a band of these coyotes sitting around just outside the firelight, giving vent to long-drawn howls as of a dying or departed ghost," says Whitman in his graphic description of this part of the run. "We have had to build roads in places. We carry a shovel and pinch bar, often being hung up by the axle on rocks and sagebrush.

## CHANCE BLOW MAKES BAILEY LAW GROGGY.

(Continued from page 734.)

are sufficient opportunities whereby the determination of this court may be reviewed.

In determining whether to consider the constitutionality of the provisions of this statute which are here attacked, the court is bound to take into consideration the actual situation presented.

It is clearly the duty of every police officer to arrest any person who fails to display the number on the automobile where required by this statute. If the person arrested is a dealer or manufacturer not operating the machine for his own private use or for hire, the police officer cannot perform any judicial function and determine whether the arrested person is telling the truth or not, and thus the persons who are excepted by the statute and who would be ultimately acquitted are subjected to arrest and imprisonment, with the consequent violation of their rights through no fault of the police officer. Such a condition of affairs, where a statute is deemed to be unconstitutional, requires immediate remedy, and our clear duty is to determine whether the statute is constitutional or not, rather than to formally disallow the demurrer and permit the defendant to appeal with the consequent confusion and delay that such a course would entail.

The demurrer is allowed and the defendant is discharged.

Charles Thaddeus Terry, counsel for the National Association of Automobile Manufacturers, was called into the MacWilliam case by the court, and was the attorney of record in the Claude Farr case. He made arguments on both cases and submitted briefs bringing out most strongly the respects in which the law is unconstitutional, and to his efforts the credit of this victory is due, for, although it was to an extent a chance blow, it was not such with Mr. Terry, but the result of hard and ably directed work.

Mr. Terry does not consider the decision merely an opening wedge which will enable the automobilists to again go before the anti-automobilists and supplicate for a more lenient law. He intends to follow up the matter, and while the MacWilliam case is disposed of, he already has filed notice of appeal in the Ellis case, and on appeal all the broad points of the unconstitutionality of the whole licensing scheme will be argued.

After the decision had been announced the daily papers erroneously stated that it applied only to New York County, which is limited to Manhattan Island and the Borough of Manhattan. According to Mr. Terry, the jurisdiction of the court extends over all the boroughs of the greater city, and takes in the annexed territories of The Bronx, Richmond and Kings and Queens counties. To a Motor World representative Mr. Terry said:

"You do not want to underrate that decision and make little of it. While the Special Sessions may in one sense be a petty court, it is not so very petty. The decision was rendered by the Board of Justices of the First Division of the Court of Special Sessions of New York City, and it applies to all parts of the city. If the District Attorney appeals from it—and I hope he will—

and the Appellate Court confirms the decision, it then becomes the law for the State. In the mean time you want to remember that there are many minor courts spread through the towns and villages of the State which are in their way more petty than the Special Sessions, and the comity between courts will naturally impel them, in the absence of any higher decision, to respect this one of the City Court of New York."

### The Farr and Tesa Cases.

Among other cases disposed of by the Court of Special Sessions last Friday were those of Farr and Tesa, mentioned in the decision in the MacWilliam case, and one against N. Mitchell. The decision in these was:

"In the cases against Claude Farr, Julian Tesa and Nathaniel Mitchell the court allows the demurrers incorporated and discharges the defendants, because of the insufficiency of the complaints. In the Tesa case it was also contended that a motorcycle is not a motor vehicle within the meaning of the statute, as it may be operated by pedalling. The court decides against this contention."

### W. H. Ellis's Case.

In the case of W. H. Ellis, who was sentenced to have his right to use his automobile on the highway suspended for two weeks, and who raised objection through Charles Thaddeus Terry, counsel for the National Association of Automobile Manufacturers, the following decision was rendered on last Friday:

"The defendant was convicted on July 20, 1903, of violating the speed ordinance of the Highway law, as amended by Chapter 625 of the Laws of 1903, in that he operated an automobile at a rate greater than that permitted by law.

"Counsel for the defence objects to the court passing sentence upon the defendant pursuant to the provisions of Section 169a of the Highway law, upon the ground that so much of the penalty provided therein as requires the court to suspend the right of the defendant to run an automobile is unconstitutional.

"The section provides that in addition to the penalties of fine or imprisonment referred to in Section 169b of the law, that an offender shall be further punished for the first offence by a suspension of his right to run an automobile for a period of not less than two weeks."

"The learned counsel for the defence has presented some very grave objections to the constitutionality of this provision of the law as violative of Article I, Section 6, of the constitution of the State of New York. In this case, however, should we fail to impose the sentence required by the statute, there would be no means of testing our determination on appeal.

"We must therefore assume the jurisdiction conferred upon the court by the statute and pass judgment in accordance therewith.

"The objection is therefore overruled."

### Speed Worries British Motorists.

Much acrimony has developed in the British Parliament over the proposed new law relating to automobiles, and it reflects largely the condition of popular sentiment, which is sharply divided on this subject. The bill passed by the House of Lords was amended in many particulars during its pendency in the House of Commons, where it was passed on August 8. The amendment which will probably provoke most discussion when the Lords take up the bill anew is one fixing a speed limit of twenty miles per hour.

One of the earnest opponents of a speed limit is the Right Hon. Walter Long, President of the Local Government Board, who says, in the course of a letter to the Central Chamber of Agriculture requesting the view of the Board:

"Mr. Long regrets that he is unable to agree with the Chambers of Agriculture in this matter.

"He is advised by those who are administratively in touch with the question of safeguarding the public that the present legal limit of speed does not, in fact, constitute any effective protection to the ordinary users of the roads. The effect of the legal limit is rather to distract the attention both of the police and of the motorist from the vital question—the safety of the public—to the comparatively unimportant, and in all cases highly controversial, question of the actual speed in miles per hour at which a particular car is travelling.

"A legal speed limit has now been experimentally in operation for some five years; but the area of its observance has been practically limited to the field of vision of the local policemen, and even in that narrow field it has often been impossible to prove its infraction.

"The law has been ineffective, and has been brought into contempt. It has failed to protect the public; it has failed to suppress the abuse of the roads by motorists.

"On the one hand, it has produced a system of police ambushes and technical summonses which have irritated the motorists, and on the other hand it has resulted in an embittered feeling in the general public against all persons who use motors, which, as a dangerous class feeling, is perhaps without parallel in modern times.

"Mr. Long holds that this unfortunate and even dangerous state of affairs constitutes the most trenchant condemnation of the existing legal speed limit.

"It is his confident hope that by abolishing the technical and unenforceable speed limit, and by making the motor driver responsible for reckless driving at any speed, he will concentrate the attention of the motorist on what is, after all, the only crucial question—namely, the safety and comfort of the users of the road, whether a car be travelling at two or twenty miles an hour.

"Against those motorists who still disregard the public danger an effectual deterrent is provided in the bill before Parliament by the provisions for identification of cars, for the licensing of drivers, and for the increase of penalties."

## WRECK CAUSED BY A MOUSE

### Mr. Dooley's Lost Mascot Takes an Automobile Ride With Exciting Results.

A mouse was the principal agent in wrecking an automobile in New York City on Sunday last. A Great Dane dog figures in the exciting tale which is to be told. There was a young woman in the case, as a matter of course. When a mouse and a maid hold a seance something is bound to happen.

Miss Helen Finerty, the heroine of the story, who failed to prove herself a heroine, was the sole passenger, as she supposed, in a big touring car which John C. McCafferty, of 2285 Eighth avenue, was taking to Inwood to meet the other members of a party which was to make an automobile trip to Hastings and Ardsley. The vehicle turned into the Boulevard Lafayette at One Hundred and Forty-ninth street, and a moment later people on the street heard a terrified scream and saw Miss Finerty fall back in her seat.

The scream which had alarmed the pedestrians demoralized Chauffeur McCafferty so completely that he steered the automobile onto the sidewalk, where it was headed for a steep embankment, and for a fence which it smashed. McCafferty recovered himself in time to prevent a plunge over the embankment; but in escaping Scylla he ran into Charybdis. In other words, he ploughed along the brink until the automobile crashed against a tree, throwing the chauffeur out and sustaining considerable damage, but saving itself and occupants from more serious disaster. McCafferty was unhurt.

Miss Finerty had fainted, and McCafferty went to her assistance. As he opened the door of the tonneau a mouse with a green ribbon around its neck sprang out and ran down the roadway, with a Great Dane dog in pursuit. Miss Finerty was hysterical, and it was some time before she was able to tell what had happened to her.

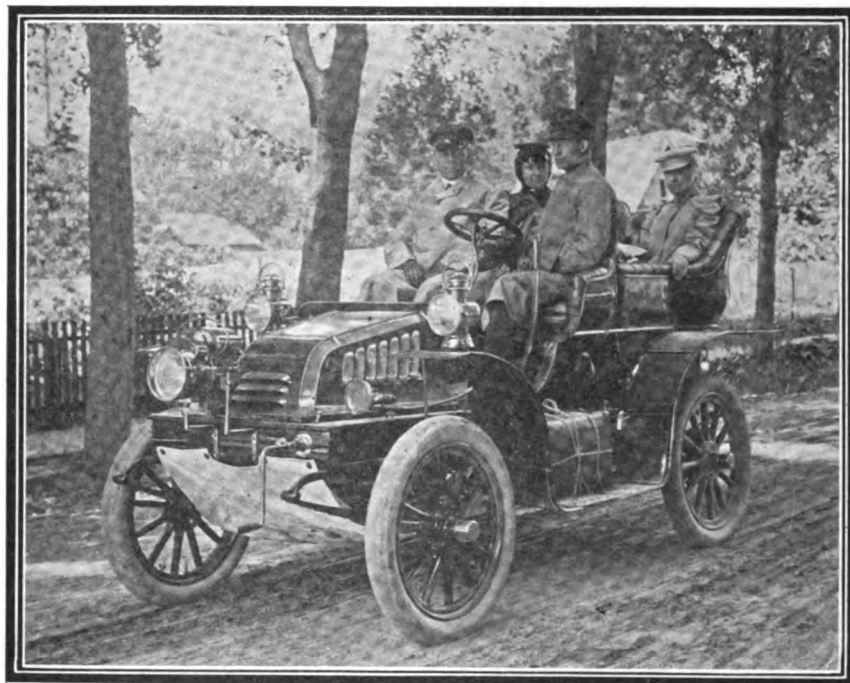
Now, when a mouse gets into close quarters with a young woman, the latter, if she is aware of its presence, usually jumps up on anything convenient and enwraps her ankles closely with her skirts. This mouse took Miss Finerty at a disadvantage, and the first she knew of its presence was when it began to assure itself that Miss Finerty's shoe-strings were tied all right—or something like that.

By the time Miss Finerty had concluded the narration of her experience the Great Dane reached the automobile, his tail wagging and a bit of green ribbon fluttering from his mouth. McCafferty realized the situation at once. The mouse was "Mamie Dooley," the mascot of John J. Dooley, candidate for Tammany leader in the Twenty-third Assembly District. The Dooleyites held a meeting the Thursday night preceding this occurrence, and the scene of the gathering was the building where this particular automo-

bile was stored. "Mamie" escaped during the evening, and Mr. Dooley was so disconsolate that he offered \$100 reward for its recovery.

The mouse had hidden in the upholstery of the automobile, to emerge at the inopportune moment which has just been described. The Great Dane is another of Mr. Dooley's mascots, and was enjoying a ride with McCafferty. He recognized the little fugitive at once, for the two animals are very chummy, and, pursuing it, was successful in catching it. On reaching the automobile the dog opened his capacious jaws willingly enough to turn over his little prisoner to the chauffeur.

Subsequently Mr. Dooley gave McCafferty \$200 instead of the promised \$100. The



chauffeur gave half the amount to Miss Finerty, because, so he said, she had helped him find the mouse. But the truth of the matter, as the story shows, is that it was the mouse which found Miss Finerty.

### Saratogans Favor Automobiles.

Ever since the automobile has been in vogue it has had its due amount of prominence at Saratoga, but it has never been so distinctive a feature of summering at that fashionable resort as it is this summer. The big touring cars are very much in evidence, attracting so much attention that the light runabouts appear only ordinary.

Among prominent owners who have been seen on the road to where the ponies are running daily are Harry S. Black, in a Mercedes; Isidor Wormser, Panhard; John W. Gates, Mercedes; Dr. J. Grant Lyman, Mercedes; E. R. Thomas, Mercedes; Harry Payne Whitney, Mercedes; John A. Drake, Mercedes, and Albert C. Bostwick.

"How to Drive a Motorcycle." See "Motorcycles and How to Manage Them." \$1. The Goodman Co., Box 649, New York.

## FROM KOKOMO TO HAZELTON

### Banker Price Tours the Thousand Miles Separating These two Towns.

From Kokomo, Ind., to Hazelton, Pa., almost 1,000 miles, a Haynes-Apperson touring car was driven without a skip or break, the journey being brought to an end on July 29. The illustration shows the owner of the car, J. B. Price, a Hazelton banker; Mrs. Price, their niece, Miss Roberts, and Frank Nutt, the clever demonstrator who has piloted the Haynes-Apperson to victory in all the principal contests of late years.

The journey was accomplished in seven days, an average of nearly 135 miles a day. The best day's run was that from Cleveland to Buffalo, 210 miles. This was covered in ten hours. Through Southern New York and Northeastern Pennsylvania the roads were bad, those in Pennsylvania being especially rough and mountainous.

Upon reaching Hazelton Mr. Price wired the Haynes-Apperson Co. that the ride had been a remarkably successful and enjoyable one, adding that the car "could not have worked better."

### 'Bus Line for Richmond.

Richmond, Va., has a public service company, organized to establish and operate an automobile omnibus line. Sufficient funds have been subscribed or guaranteed, and it is expected that the first of the vehicles will be in service by the end of this week. The company will ask for a charter.

The vehicles to be used will be of thirty horsepower, and each capable of seating twenty people, with which they will climb any hill in the city.

## BANKER CHOOSES A NUMBER

**Chicago's Fighting Motorist Will Display 4-11-44 on His Automobile.**

It is a merry war which A. C. Banker is waging with the police authorities of Chicago. His arrest on Friday, July 31, was followed the next day by his conviction for operating an automobile unmarked by any number and the imposition of a fine of \$5.

Banker was arraigned before Justice Prindiville upon two charges. William A. Jennings, his counsel, in asking for a dismissal of the charges, exhibited an injunction restraining the police from arresting Banker for driving an automobile without a license.

"These two charges can be brought into one, your honor," said the attorney. "This injunction makes my client exempt from the charge of failing to have a license. The ordinance as passed by the City Council and upheld by Judge Tuley recently sets forth that the number upon the machine or automobile must be taken from the license. Now, when we have no license and are exempt, how can we have a number on the machine?"

"Judge Tuley in rendering his decision held that the ordinance requiring the numbering of automobiles was valid," said Justice Prindiville. "He did not decide upon the question of license, which is now before the appellate court, but passed over it. I will do the same in this instance—dismiss the charge pertaining to the license and fine the defendant \$5 and cost for failure to have his automobile properly numbered."

Banker's counsel, immediately after the court imposed a fine of \$5 upon his client, filed an appeal bond. Banker is therefore involved now in two appeal cases. The first is the appeal of the city of Chicago against Justice Healy's injunction, and a decision upon this is expected in September.

The situation as it now stands in Chicago is thus summed up by Mr. Jennings, Banker's counsel:

"The enforcement of the license ordinance was enjoined in Banker's case against the city. The order granting the injunction has been appealed by the city, and the matter is now pending in the appellate court. Judge Tuley did not pass on the validity of the license ordinance, admitting its enforcement was enjoined, and contrarily that the ordinance of June 8, 1903, requires the number of the license to be placed on the automobile. He decided that the numbering ordinance is valid, and denied the motion for injunction restraining its enforcement. Banker does not have to have a license, and consequently cannot get a number from the license; but Justice Prindiville holds he must put a number on his car. Any number will do, so he will put on '4-11-44.' Banker was fined \$5, from which he appealed to the Criminal Court. We have also appealed the case of the Chicago Automobile Club from Judge Tuley's decision denying the injunction. The numbering ordi-

nance might possibly stand if modified. In its present form it is, in my opinion, void. The licensing ordinance is void and cannot stand. The city has no power to pass such an ordinance, as it gives arbitrary powers to the three persons composing the Board of Automobile Examiners, and delegates to them powers which cannot be delegated. Any member of this board may, without notice, revoke any one's license and forfeit his \$3 for any cause deemed sufficient by such member. This is a judicial power of the most arbitrary kind."

## Two Speeds and Views.

A Winton touring car, with a full load of passengers, went by, driven at perhaps eighteen miles an hour over the rough block pavements. The wheels were trembling and shivering, jumping from one unevenness to another, as if protesting against such scurvy treatment. The body was so finely poised, however, that but very little of the jolting was communicated to the occupants of the car, and they laughed and chatted, seemingly unconscious of their unusual speed, although passersby stopped to look at the spectacle.

"They must be in a hurry to get somewhere," remarked one of the latter, and his companions nodded assent.

In the wake of the first came another, driven at a more decorous pace. "Now, that's more like it," said the man who had first spoken, as it came on at little more than a crawl. "Pretty slow, though," returned one of the others, doubtfully. "Don't know but what I like the first best."

The car passed by, and then the cause of its slowness was revealed. The right-hand rear tire was gone, both cover and tube, and the heavily loaded car was being driven along on the naked rim. Even above the noise of the engine the grinding sound of steel on granite was heard, and it did not require any great stretch of imagination to picture the condition of the rim when home was reached. Rather than, at the sacrifice of pride, relieve the car of its load, the driver was taking the chances of ruining the wheel.

## Indiana Farmers Prepare for War.

Farmers in the northern counties of Indiana are so crazy from the development of the anti-automobile microbe in their bucolic brain boxes that they are getting up an association to fight the automobile. Their leaders are vitriolic in denunciation of the new vehicle, which is charged with the possession of more bad qualities than there are in an anarchist's bomb. Organizers are at work in the rural districts.

## Horsemen Turn Motorists.

Horsemen in and around Chicago are developing a sentiment in favor of the automobile, and nearly all the owners of the best horses are automobilists. "Sam" Wagner, the well known turfman, has just purchased a sixteen horsepower Peerless touring car, which he takes out every day. There is a probability that the horsemen will organize an automobile club of their own.

## MAGISTRATES ARE KICKING

**They Object to Charges Against Automobilists Under the City Ordinances.**

Park ordinances, city ordinances and the Bailey law have been making confusion in automobile cases in that portion of the Greater New York which lies over toward the ocean. Police officers of the Prospect Park station, Brooklyn, have been arraigning their prisoners under the ordinances, and as these differ in many points from the Bailey law the magistrates are somewhat puzzled as to how to deal with cases brought before them.

Magistrate Voorhees, of the Flatbush court, spoke his mind concerning this matter on Friday morning in connection with the case of James Arkell, of 524 Fifth avenue, Manhattan, who was arrested by Mounted Patrolman Rutherford on Ocean Parkway the day before, charged with going at a speed of fifteen miles an hour. Arkell, with a party of friends, was going toward Manhattan Beach when he was arrested. He gave bail to appear on Friday morning, but was not in court when the case was called, and it was adjourned until Thursday of this week.

Before adjourning the case Magistrate Voorhees asked the policeman why he did not prefer a charge against Arkell under the existing law, instead of under the ordinances. Rutherford replied that he did not know anything about it, but that the arraignment was under instructions. The magistrate then said that arraignments should be made under the existing laws, instructions or no instructions.

It is said that the commanding officers of the Prospect Park station have as yet received no instructions from Commissioner Greene as to the enforcement of the Bailey law, nor have they received copies of the law.

## For Washington Pleasure Seekers.

The Great Falls Transportation and Amusement Co., of Great Falls, Md., was formed on July 31. The object of the company is to put on two electric "carryalls" to run between Cabin John Bridge and Great Falls. The company proposes to erect an observatory tower similar to the one now in course of erection at Niagara Falls, with a dance hall on the ground floor, the second landing to be given up to various booths, while the top landing will be used as the observatory and photograph gallery. C. Chan-teu Nordlinger is president and general manager.

## Gabriel's Horn Woke Them.

The Irish Figaro tells a funny story apropos of Jarrott's accident in the Bennett Cup race. It describes how Jarrott and Bianci were picked up quite dead and laid out in a barn, covered with sheets and surrounded by candles, and there they lay waiting for the wake until Gabriel came along and blew his horn, whereupon they came to life again and wanted to resume the race.



## LIFE OF AUTOMOBILES

## Experience Shows That Their Period of Usefulness is Fully Ten Years.

Paris, July 31.—There is one thing about automobiling that is not always taken sufficiently into account by the average user. We mean the life of the vehicle, or rather the period during which it will continue to meet the owner's requirements. It is, of course, certain that the man who pays \$3,000 for a vehicle does not expect to get full value for his money in actual service, unless he is a business or professional man, to whom economy of time is a great consideration. Except in such cases the automobile can only pay for itself on condition of its doing good service for a specified time, which time is to be calculated according to the class of work it has to perform—that is to say, whether it is in constant or occasional use or is employed for business or pleasure purposes or both—and, in any event, it will take a number of years before the purchase value will be wiped out by the economies which the owner is able to make by its use.

It is difficult to say how long an automobile should be in actual service, because this varies with different requirements. The question of general interest therefore is the time during which the motor vehicle is capable of doing efficient work. Everything is limited by the durability of the car, because the owner cannot work out his economies beyond that period. What, then, is the life of an automobile? Not so very long ago it was generally estimated that the motor vehicle would do excellent service for six years. Now, if we were limited to this time it is evident that the majority of users would not find it to their interest to purchase automobiles. They would scarcely be able to cover the purchase money in such a short period. Formerly no one ever thought of buying automobiles with the idea of using them until they fell to pieces, but it was the usual practice to invest in cars either by making an immediate profit on their resale or by disposing of them at the end of a year or two, so that the owner always had up to date cars and usually made a good profit on the transaction. With the increasing production of cars there are much fewer opportunities for engaging in this form of investment, and the sale of second hand cars or of new vehicles with premiums—except in a very few cases—is rapidly losing ground.

The owner must therefore buy his car with a special view to its durability, because he may not have much of a chance of making anything out of it by speculative transactions, and, fortunately for the future of the automobile, its life is found to be much longer than was supposed in the earlier days of the industry, when six years were fixed as the limit of its actual service.

As a matter of fact, it is a common thing to see cars running in Paris—old Panhards and Delahayes, for example—dating from 1896 and 1897, and one of the Panhard directors told us some time ago that they took particular pride in seeing their old cars on the streets. These cars were, moreover, built at a time when the industry was far less advanced than it is at present, and it may reasonably be supposed that the new vehicles, constructed on scientific lines with special material and designed to resist the maximum strains, will last for a much longer time. There seems to be nothing unreasonable in putting this life at ten years at least, and it will probably be found that there are few, if any, users where a ten years' economy will not pay back the purchase money with interest, leaving the owner with a vehicle which can be reconstructed at comparatively small cost for another long period of service. Of course, there is still the question of a car getting out of date; but this is of no importance to the ordinary user, who is quite satisfied with a vehicle that will meet all his requirements as regards comfort and reliability.

Two or three accidents that have happened recently have shown the danger of drivers allowing nervous people to sit beside them. The other day the owner of an automobile was descending a gradient when his wife got frightened and clung to his arm, with the result that the car ran off the road, killing the owner and seriously injuring the other occupants. At the Ostend meeting Willy Poege was competing in the kilometre tests with his Mercedes when he was told that he must have a mechanic aboard. One of the spectators offered to accompany him, and when fairly going the amateur mechanic lost his head; he clung to M. Willy Poege, whose coolness and promptness in stopping probably saved them from destruction. According to an alleged eyewitness of the Fair accident—for the witnesses in this case are getting a reputation that would put Ananias himself to the blush—Mr. Fair took hold of his wife's dress to prevent her from jumping out of the car in fright, and it was this which caused the vehicle to swerve. There is undoubtedly great risk in allowing nervous people to ride in the front seats of fast cars. The driver's attention is constantly on the strain, and the slightest distraction at a critical moment may prove fatal. Of course, this is an argument against fast speeds, but at the same time it is by no means improbable that the nervousness of a passenger may be a source of peril in ordinary touring cars. When travelling at twenty-five to thirty miles an hour it is very desirable that the driver should be either alone on the front seat or accompanied by an experienced mechanic; in any event, his seat should allow him full freedom of movement, the same as in racing cars.

There will be something very interesting to say about carburants when the tests now being carried out at the laboratory of the

A. C. F. are terminated. Judging from the way in which new gasoline and alcohol preparations are being presented for testing purposes the experiments may last several weeks and even months. They have already given results rather surprising to those who have always supposed that the gasoline motor car can only run satisfactorily with .680 spirit. It is found that a very high efficiency is obtained with gasoline of .700, and in one or two cases even .730 has proven very good. A test was made this week with ordinary kerosene, when the results were found to be very satisfactory, but the motor was not run long enough to show whether the valves and cylinder head would become clogged up with soot and byproducts, as, of course, they would in a very short time. All sorts of alcohol mixtures are being tried, but so far the carburetted product is only found to give a high efficiency at comparatively low speeds, and the consumption is higher than gasoline. It is impossible to draw any safe deductions from the tests already made, as this can only be done by comparison with a large number of different preparations which have not yet been tried. It seems clear, however, that the tests will do a great deal to modify the usually accepted ideas about the efficiency of spirit of various densities, and they may lead to the use of gasoline of a higher specific gravity, which is obviously a consummation devoutly to be wished at a time when automobilists are looking forward with some concern to a possible scarcity of .680 spirit.

Belgium offers very little attraction to the automobile tourist, who rather objects to the granite paved roads, which try his nerves as much as they do the car; but the country has at all events a reputation for hospitality that does much to smoothe the way over the horribly bad roads. Automobilists have a kindly regard for Belgium as being the only place where they can take part in speed tests, and with the Ardennes race and the Ostend meeting it has become the sporting centre of Europe. This reputation is now in a fair way of being lost. Alike in Brussels and Antwerp the bourgeois, or mayors, have promulgated regulations limiting the speed of automobiles to three miles an hour. The utter absurdity of this regulation would have been funny if it were not so serious. Three miles an hour! A man could cover more at ordinary walking gait, and it is utterly impossible to keep motor cars down to this speed without perpetually manipulating the clutch and putting a lot of strain on the engine and gear. The drivers will soon have enough of this. Since the regulation came into force Brussels and Antwerp have become deserted by automobilists, the garages having lost all their trade. It is feared that the industry, which gives employment to ten thousand hands, will suffer badly, for what is the use of buying cars when you can go faster on foot? The A. C. of Belgium is agitating strongly, meetings of automobilists are being held, and delegations are being sent to the mayors. Such a preposterous regulation cannot be allowed to exist, and it can only be hoped that when the iniquity of it is brought home to the authorities they will atone for the error of their ways by giving automobilists more liberty than they had before.



## COMPRESSION LOSS CAUSES

Are Usually Due to Defects in the Piston Rings  
—The Remedy.

A loss of compression means a loss of power. To discover the cause of this loss of power is one of those things which often baffle the motorist, even though he has got through the novitiate stage. Loss of compression is liable to be caused by several things—for instance, leaky induction and exhaust valves, a badly fitting combustion head (that is, where the head is separate from the cylinder barrel), or by badly fitting piston rings. It is with these latter that we have to deal at the present time. Supposing that we have a single cylinder engine, whose compression is bad, the valves have been taken out and ground to a perfect fit, the joint at the combustion head has been examined and there is no doubt that this is perfect, but still the compression is bad, says the Autocar.

This points to the fact that the piston rings need some attention. It is therefore necessary to disconnect the cylinder entirely from the crank chamber, so that when the former is removed it leaves the piston attached to its connecting rod. Care should be exercised when removing the cylinder not to disturb the piston rings, but to note the relative position of the slots in these as the cylinder comes off. If the slots in the rings are approximately in line, this in itself is sufficient to cause a loss of compression without the rings being absolutely bad. The internal combustion motor, as a rule, is fitted with three piston rings, and the slots of these should be equidistant from one another to insure there being no leakage past them.

The cylinder now being removed, we are enabled to carefully examine the piston and its rings, and, provided that the slots in the rings have not been opposite to one another, we now have to look for the cause of the trouble. If the rings are bad the points at which the gas has been escaping by the piston and rings will be denoted by a burnt or brown or roughened surface on the polished surface of the piston and the rings. It will frequently be found that these places occur near the slots in the rings, these being quite discolored for perhaps a quarter of an inch from each end of the slot, or it may be that one ring has not been really true when it was first put in, and it has allowed the gas to escape in small quantities at first. Continued compression of the gas has caused an increasing escape, until quite a large area of escape has been created. This, as in the other case, will be noted by the discoloring of the rings.

Having discovered the bad ring, or rings, their removal is the next question with which we have to deal. The rings being bad, it is practically immaterial whether they are broken or not in the process of their removal, but we would advise those who

are fitting new rings for the first time to be very careful in the removal, as the experience thus gained will be of benefit to them in replacing the new rings. Two pairs of hands are really required to carry out the operation successfully, though with a little extra caution and trouble it may be efficiently carried out by one person. The first thing to do is to open the ring by springing the ends apart at the slot, and this is best done by means of two implements; practically anything will do that will fit into the groove of the piston. These being inserted into the slot in the ring, they are gently forced apart so that the ring is expanded. Then, by inserting a finger or fingers between the implement the left hand can be passed round to the opposite side of the cylinder and the ring lifted, so that it rests upon the edge of the groove. It can then be forced gently off the piston. In removing the middle ring care will have to be taken or the ring will drop into the groove vacated by the top ring. If this does happen, it will, of course, have to be removed in the manner before mentioned. In many instances the bottom ring can be slid over the trunk of the piston and sprung open sufficiently to pass over the connecting rod, thus saving the possibility of its falling into the two grooves above and the subsequent trouble of its removal.

When the rings are removed it will be noticed that they are not of the same thickness all the way round, but the bore of the ring is slightly concentric, and that the slot in the ring is placed at the thinnest part. These rings, it may be stated, are turned from fine gray cast iron, this having proved, after many years of experimenting, to be the best metal from which such rings can be constructed. This form is given to the ring so as to give it a certain amount of spring, by means of which it shall of its own accord keep in close contact with the walls of the cylinder. It is not without interest to know how these rings are made, and therefore we give a brief resume of their construction. A concentric ring is turned off a suitable iron casting somewhat larger than the finished size required. The rings thus obtained are split open at any point, and a given length is taken from the circle. They are then closed together by being forced into a piece of tube, in which state they, of course, form an untrue circle. The tube with the rings, in which all the slots are in a line, is passed on to a bar provided with a shoulder at one end and a large flange or washer with lock nuts at the other end. The flange is put over a bar or mandrel, and the lock nuts are tightened up, so that the rings are held firmly in position. The tube which has served to hold the rings together is then knocked off, and the rings are turned down to the required size, this process leaving them thinner on the one side than on the other.

Baron de Zuylen and M. G. Rives have been appointed president and vice-president, respectively, of the Sixth Automobile, Cycle and Sport Exhibition, to be held at Paris this winter.

## AUTOMOBILE'S CHIEF MISSION

Will Change City Streets From Manure Yards to Clean Thoroughfares.

That the automobile has a great future I do not deny. Its chief mission is to change city streets from manure yards to clean thoroughfares, says Sylvester Stewart in the Engineering Magazine. The horse is unfit for use on city streets. He occupies too much space; he is too hard to steer; he has the wrong kind of feet on him; besides, on crowded streets his worried driver whips, frets and jerks 10 per cent of his energy out of him and shortens his life.

But whatever efficiency the automobile may attain by future improvements, it will always remain true, that if it is put on steel rails, the same engine and the same quantity of fuel necessary to pull ten passengers or one ton of freight on the best macadam road will pull at least forty passengers or four tons of freight on steel. So, instead of "making railways obsolete," the automobile will call for light steel rails for itself in hundreds or thousands of localities, and will probably be equipped in many cases with guides, so that it can run either on or off rails.

The automobile, instead of being a menace to the railway, will be a feeder to it. Light railways—T rails, plateways, etc.—will branch from main lines, and on these branches will run freight and passenger automobiles. In roadways there is nothing like steel, nor anything that makes any approach to it. Of course, in sections too thinly settled to justify two roads (a common road and a light railway), the business automobile will have to use the common road, but wherever it does it will be compelled to charge a high rate for freight and passengers, on account of the great resistance to progression encountered on all roads but steel.

### An Unbreakable Densimeter.

Motorists who are partial to the use of the densimeter, for measuring the density of gasoline, are well aware of its fragility, frequent breakages having borne it upon them. Taking a hint from this an English concern has brought out a densimeter which is made entirely of metal. The case, which is also of metal, serves as a receptacle for the spirit in which the densimeter is placed. On the stem of the latter the specific gravity marks are engraved, varying from .680 to .720, and they are just as easily read as on the glass instrument. A small cloth case fits inside the metal receptacle, and in this the densimeter is dropped, a cap put into position and the instrument can then be carried safely anywhere.

An automobile fast mail service is proposed between Knoxville and Sevierville, Tenn., the distance between the two points being twenty-five or twenty-six miles.

## CANADA BECOMES ARBITRARY

**American Automobilists Crossing the Line are Subjected to Troublesome Requirements.**

The "modus vivendi" under which American automobilists were admitted upon Canadian territory, upon identification of their vehicles and declaration of intention to return within a certain time, appears to have been declared off, and the Canadians are enforcing their law with vigor, as some Americans in Buffalo have learned by experience.

John Mesmer, of Buffalo, crossed the river with his automobile on August 2, and, to his surprise, was held up by a customs official, who demanded that he give a bond equal to the value of the vehicle and also deposit 5 per cent of its value in money. Mr. Mesmer found a bondsman in the person of Alexander Ross, who is Reeve, or Mayor, of the village of Fort Erie. But one bondsman was not enough, it was then discovered, so Mr. Mesmer hunted up Chief of Police Griffin, gave bond for \$880 with these two gentlemen as sureties, deposited his 5 per cent cash, the officials accepting American money, and went his way along the Canadian shore to the Whirlpool below Niagara Falls.

On returning to the ferry in the evening to get back to Buffalo Mr. Mesmer was again surprised. He was solemnly informed by the customs official that he had gone beyond the limits accorded in his permit, which admitted him to the Black River customs district only, while the Whirlpool Rapids lie outside of that district. The official was considerate, and did not throw him into a dungeon nor confiscate his automobile or money. On the whole, considering what might have happened, he felt that he had got off quite well.

Judge W. H. Hotchkiss, president of the Automobile Club of Buffalo, in speaking of the right of the Canadian officials to act in such a manner, said: "We are now simply subject to anything the Canadian Government chooses to require of us. We can take our choice between complying with these demands or staying on this side. Nearly every one is choosing the latter alternative."

As to the reason for it, Judge Hotchkiss said: "My understanding is that the rigorous enforcement of the existing regulations is due to the fact that a certain Niagara Falls man smuggled one or two machines into Canada last fall.

"For some time," continued Mr. Hotchkiss, "efforts have been made by the Automobile Club to ameliorate these regulations. I have lately received a letter from the Hon. J. R. Stratton, Provincial Secretary of Ontario, in which he said that this matter was under consideration, and he hoped within a week or so to be able to formulate a plan which would clear away existing difficulties. What we would like to bring about is to have Canada establish a regulation like the one in

force in France and other European countries, by which an automobilist entering the country, upon presenting an identification card, has his machine sealed with a tag which must be allowed to remain on the vehicle while in the country, otherwise subjecting him to an importation tax. This would be no sure proof against smuggling, but would undoubtedly reduce it to an inconsiderable minimum."

## Oil Treatment of Roads.

It is now held that the reason some roads treated with oil have turned out well and others ill is due to the differing bases of oils.

The San Francisco Chronicle, with the experience of California roads in view, says: "The crude oil used on the London and Aldershot road proves to have had a paraffin base, which in itself explains the cause of its failure. Everything depends upon the base of the oil used. If paraffin is the base nothing but failure can be expected, for when the volatile substances contained in the crude petroleum evaporate the residuum left is a brittle, greasy substance, which affords absolutely no protection to the roadway.

"The secret of the success of the oil treatment of roads in California lies in the fact that our crude petroleum possess an asphalt base, which leaves an asphalt covering on the surface of the roadway after the volatile elements have been evaporated by solar action. This asphalt covering is as complete a protection to the roadway as if its surface were paved with a coating of bituminous rock. And every successive oiling received in the treatment thickens the asphalt shield of the crown of the road, more thoroughly protecting the underlying foundation from the action of water, let it rain ever so hard."

## What the Stork Brought.

An automobile driver was racing along the Avenue Gambetta, Paris, recently, when he observed a poorly clad woman on a bench moaning. The chauffeur stopped the auto, and the woman complained of suffering greatly. The woman was taken in and the automobile was started for a hospital, but the woman's condition became more critical en route, and the kind hearted chauffeur found himself with two passengers instead of one, the addition being a baby boy. The mother and child were cared for at the hospital.

## Club for St. Paul.

The St. Paul Automobile Club has been organized in St. Paul, Minn., with fifty members, including some of the best known business men of the city, and officers have been elected as follows: President, Paul Gotzian; vice-president, R. C. Wright; secretary, John Patterson; treasurer, Gustave Scholle. Several women will join the club, as there are a number of women automobilists in the city.

An ordinary lifting jack is useful in a number of ways. At a pinch it can be used behind the rear wheel in place of a block to keep a stranded car from running backward downhill.

## FARMERS ON THE WARPATH

**Rustics Living in the Vicinity of Evanston, Ill., Form an Anti-Automobile League.**

Farmers living in the vicinity of the automobiling courses west of Evanston, Ill., have organized an anti-automobile league, and the organization numbers about seventy-five men, who are so indignant over the recklessness of certain chauffeurs that they propose to accord drastic treatment to the first one who falls into their hands. If the guilty one escapes they will wreak vengeance upon the next one, whether he be guilty or innocent.

The men represent Glenview, Niles Centre, Morton Park, Jefferson, Dutchman's Point, Welcome Park and Palatine. The movement grew out of a feeling developed after an accident to a woman named Schmidt on Saturday afternoon, August 1. With a view to taking it out of the next automobilist who might come along, the farmers gathered near Glenview on a much travelled road, where they hid a heavy truck among the trees and waited.

As soon as an automobile came in sight they pushed it into the road. The result can only be imagined, and it was only due to the fact that the machine was running at moderate speed that the occupants were not killed. The machine was a wreck, and had to be shipped to the factory. The man gave his name as James H. Wilson, of Evanston, but no such man owning an automobile resides there, and the farmers say that the majority of those who have been stopped have given fictitious names.

On the following Sunday night the farmers met at Welcome Park and organized as the Farmers' Anti-Automobile League. From this organization a vigilance committee of twenty was selected to mete out justice to reckless chauffeurs. Joshua Stiles was elected president of the league, and John Jukes secretary and treasurer. The farmers declare that they will stop the automobiles or destroy them.

## What the Automobile Contained.

Burglars would betray a lack of the cunning peculiar to their craft if they failed to discover a use for the automobile. That they do not propose to allow smugglers to monopolize it for illegal purposes was cleverly demonstrated in Paris last week.

Bastide, a dealer in the Rue Victor Masse, was closing his shop one evening when a man arrived in an automobile and requested permission to store it in the shop over night. Bastide took the machine in, with the result that he discovered the next morning that he himself had been taken in. The man who had brought the automobile was a cracksmen whose confederate was hidden in the vehicle. During the night the pair rifled the shop of all the valuable tools and accessories, loaded them into the automobile and decamped.

## BRITISH 1,000 MILES TRIAL

**Tests Include Showing Regarding Brakes, Dust, Vibration, Smoke and Cleanliness.**

Since the rules were issued for the 1903 Thousand Miles Trial of the Automobile Club of Great Britain several amendments have been introduced, and questions as to fuel consumption, brakes, dust and other important matters have been dealt with by the judges and the Trials Organization Committee. The chief of these changes are as follows:

A formula is to be adopted which will take into consideration the weight of the vehicle and the consumption per mile over the whole trials, but speed is to be omitted from this formula. The consumption will be worked out in pence per ton-mile, the car showing the least cost per ton-mile receiving full marks and the others in exact proportion. The price of fuel is to be taken as the wholesale price f. o. b. London as quoted by the makers. Three grades of spirit and one of petroleum will be allowed for. Observers on the first day will see that the fuel tank is full, and will afterward record throughout the week the quantity of spirit put into the tanks, and at the end of the week will record the amount of spirit required to fill the tank to its original level. Special tanks from which to replenish cars may be erected in a suitable position, provided that they are arranged so that the contents can be easily measured. They must be locked up, and be in all respects subject to the approval of the judges. The time occupied in filling such tanks will be counted as deducting marks under Rule 42.

At the commencement of the trial each car is to be brought to a standstill twice by each of two independent brakes. There are to be two tests for stopping when descending backward and two tests for stopping when descending forward, together with a special surprise stop on one of the days of the trials. This test is to be made at a spot known only to the judges, the competitors to have no warning, but to pull up on the exhibition of a red flag, with "A. C." in white letters on it, from the side of the road. On seeing this the driver is to bring his car to rest in the shortest reasonable space, i. e., without damaging his tires. Each of these five trials is to count 40 marks, the remaining fifty marks to be awarded by the judges for the design and method of connecting the brake mechanism.

The suggestion by Colonel Crompton for the dust test is that a certain portion of the road should be covered with a given quantity of suitable material, and the cars should be driven at the same speed, or as nearly so as possible, over this prepared portion of the road, and ladders should be placed behind the cars, and the amount of dust should be recorded by photograph. Preliminary exper-

iments are to be made in order to perfect the details of the scheme.

Vibration is to be measured, when standing, by the personal observation of the judges, and the cars which are considered by them to be up to a certain standard should receive full marks, and the others in proportion as may be decided by the judges.

Observations as to the amount of smoke or vapor are to be made by the judges, assisted by observers, both at the Crystal Palace and on various portions of the route.

Cleanliness is to be decided by observations of the judges, who will be conveyed to various parts of the routes in order to make additional observations for noise, dustlessness and the emission of smoke or vapor on various portions of the route. If necessary, the cars are to be stopped a quarter of a mile before such positions, and allowed to proceed at one-minute intervals, it being only intimated to them that the judges require a control at such a place, the object of the judges not being stated.

### Providence Meet Decided Upon.

By vote of the board of governors of the Rhode Island Automobile Club, at a special meeting held in Providence last week, it was decided to hold the third annual race meet at Narragansett Park on Saturday afternoon, September 19. A committee of arrangements was appointed, consisting of R. Lincoln Lippitt, chairman; C. Prescott Knight, Fred E. Perkins, Herbert H. Rice, William P. Mather, Howard D. Wilcox and John R. Dennis. A tempting list of prizes will be offered.

### Race Meet for Macon.

Automobile racing is a sport which will be new to the people of Macon, Ga., when it is introduced there at the coming State Fair. Director General Huff of the Macon Fair Association announces that an automobile race will be one of the features.

Arrangements have been made for the entry of several expert chauffeurs, including some from New York. The mile track at the fair grounds will be banked at both ends, and it is hoped that new records will be made.

### Syracuse Seeks Racing Stars.

The committee in charge of the automobile races to be held at the State Fair track, Syracuse, N. Y., on the afternoon of September 12, under the auspices of the Syracuse Automobile Club, has positive assurances that Percy Owen, L. P. Mooers and H. S. Harkness will be present to compete in the regular and match races. Efforts are being made to secure the presence of "Barney" Oldfield.

### Cooper Recovers From Illness.

"Tom" Cooper, of Detroit, has recovered so far from the effects of the operation for appendicitis which he underwent about three weeks ago that he has left the hospital. He is regaining his health so rapidly that his friends expect he will be able to participate in the annual races of the Detroit Automobile Club, which are scheduled for September 7 and 8.

## TEST MOTOR BAGGAGE TRUCK

**Gare du Nord in Paris Experiments With one— Seems to be Successful.**

At the Jersey City station of the Pennsylvania Railroad Co. horses are still used to haul the baggage trucks to and from the baggage room on the station platforms. It has been suggested that motor vehicles could do the work much more expeditiously and effectively, but nothing has ever been done in this direction. At the Gare du Nord, Paris, however, the idea has been carried out in the shape of an electric truck, which is in use for conveying passengers' luggage from the trains to the customs examining sheds. The vehicle is an experiment, but if the working warrants it the company intends to substitute these self-propelled trucks for the old hand trolleys now used for all purposes.

In appearance the new vehicle does not differ much from the hand trolley, except that it has a box mounted on either end to contain the accumulators. A small Kapsel motor is attached to the chassis in the centre of the vehicle, and drives by chain and sprocket to the rear axle. The steering tiller also acts as the controller, and by slightly depressing it the circuit is completed and the motor started. To stop the motor it is only necessary to lift the tiller. It is capable of carrying a load of half a ton and is, of course, a great time saver as compared with the old method of transporting baggage by hand.

### Speed Contest at Saratoga.

A speed contest of twenty-five miles is proposed by the automobilists now in Saratoga, and it is expected that if the consent of the authorities can be obtained for the use of the roads at least twenty of the leading owners of automobiles now at the resort would participate.

The idea was broached at the Whitney-Widener dinner one evening last week, and it was heartily favored. A committee will wait upon the authorities of the township of Saratoga Springs and old Saratoga to obtain the necessary right of way over the course proposed, which is from Saratoga to Schuylerville and return.

### To Race on Churchill Downs.

"Barney" Oldfield and "Tom" Cooper, of Detroit, will meet again, this time on the famous Churchill Downs track, at Louisville, Ky., on August 15. Articles for the race were signed last week. The race will be conducted by the Louisville Automobile Club, and will include three races at a mile, five miles and ten miles.

### Some London "Cases."

London hospitals are having "cases" who allege that they were run over by motor cars when their injuries were really due to drunkenness. They got their "tip" from the fact that one hospital collected a fund for the benefit of one of its inmates who made a claim of this kind.

**Automobile Interest at Harvard.**

Harvard University, the biggest and oldest college in America, naturally attracts a very large share of the wealthy students of the country. This fact, and the excellence of the roads which radiate from the seat of the university, in Cambridge, Mass., cause it to be noted among the Bay State automobilists as the centre of a large and active interest in the motor vehicle. Nearly fifty students own automobiles, and it is safe to say that twice that number are interested in the sport.

The Harvard automobilists make their headquarters at the big station of the Harvard Automobile Co., in Quincy Square. Within a stone's throw of Beck Hall, Westmorly Court, Randolph Hall, Russell Hall, Claverly Hall and the Harvard Union, this station is an easy rendezvous. Here from early morning to late at night can be found the students of Harvard, with coats off, and black, grease stained hands, laboring over their machines. Each of them knows how to care for his own vehicle, and many of them, especially the Lawrence Scientific students, could give a manufacturer points as to needed improvements and the like. George C. Cannon, of New York, who has attracted attention by his self-built machine, is an example of this kind of student. He is taking the course at the Lawrence Scientific School.

Boston, New York and Chicago boys are the most conspicuous automobile enthusiasts

at Harvard, and many of them own very fine cars. Among them are R. T. Crane, of Chicago; Charles De Young, of San Francisco; J. W. Myers, of New York; E. C. Fitch, of Boston; W. H. Yule, of Chicago; Edward I. Cudahy, of Chicago, son of the pork packer; Lawrence Mott, of Cambridge; H. S. Allen and W. H. Schraff, of Somerville; Robert Jordan, son of the department store man of Boston; Clarence Mark, of Chicago; Austen Gray, of Albany; D. C. Williams, of Chicago; A. Robinson, of New York; A. L. White, of Hyde Park, Chicago; G. S. Holden, of Cleveland; S. S. Breese and E. C. Fitch, of Boston; James O'Reilly, of St. Louis; P. A. Conley, of Chicago; P. A. Priol, of New York; Harry Hammond, of Portland; Robert Foster, of Portland; S. H. Wolcott, the crew man, son of the late Governor Wolcott of Massachusetts; F. L. Kennedy, W. R. Tuckerman and Warwick Green, of New York; O. B. Dabney and A. W. Jones, of Malden; J. Jackson, of Boston; Stanley Miller, of Cambridge; E. P. Mosely, of Newburyport; Thomas Curtiss, of Cambridge; W. R. Wade, of Newton; Frederick T. Tabor, of New Bedford; J. A. Cangle, of New Jersey; A. R. Beal and D. D. Peterson, of Davenport, Iowa.

**The First Renault Car.**

In 1898 the first Renault car was placed on the market. It was propelled by a  $1\frac{1}{4}$  horsepower air cooled engine. A short time afterward the concern brought out a "more powerful" car, it having a  $3\frac{1}{2}$  horsepower engine, water cooled.

**Music and Automobiles Don't Mix.**

Now it is Chicago that objects to the mixing of music and automobile noises. The leaders of bands playing in the public parks complained to the police that their best efforts, whether in rendering ragtime or Wagner, were nullified by passing motor vehicles, which "puffed and snorted" and left behind them odors that were not of Arabia the blest. Their protests were heeded, as an order was sent out from headquarters to abate the nuisance.

In Lincoln Park chauffeurs were not even allowed to drive their cars along the wooded roadways that pass near the bandstand. A special squad of officers stood at either entrance to the park and forced them to use the outer esplanade.

One automobilist in a bright red touring car objected. He said that he had with him a party of friends from Milwaukee who had cast aspersions upon Chicago's claims as a musical centre, and he had at once brought them out to listen to the selections played in the parks. This insidious appeal to local pride almost won the day for the chauffeur. The police held a brief council of war, and finally compromised by giving the party a printed programme of the concert. It served its purpose and the party moved on.

**A Blacksmith's Car.**

Charles Mitchell, a Searsboro (Iowa) blacksmith, has found time between his blacksmithing jobs to build an automobile, which is said to be perfect in every respect and neat in appearance.



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JOHN MAXWELL, Onondaga, N. Y., Agent for Central New York.

## The Week's Patents.

734,913. Pneumatic Tire. Arthur H. Marks, Akron, Ohio, assignor to the Diamond Rubber Company, Akron, Ohio, a corporation of Ohio. Filed Sept. 9, 1902. Serial No. 122,609. (No model.)

Claim.—In a detachable pneumatic tire, the combination of a rim, an inner tube surrounding the same, a sheath outside of the inner tube extending onto opposite sides of the rim, plates removably carried on opposite sides of the rim, bolts extending through said rim for holding said plates in place, and short pins for locking the sheath to the plates, said pins being carried by one of such members at points opposite the sides of the rim, substantially as described.

734,914. Pneumatic Tire. Arthur H. Marks, Akron, Ohio, assignor to Diamond Rubber Company, Akron, Ohio, a corporation of West Virginia. Filed March 31, 1902. Serial No. 100,655. (No model.)

Claim.—In a detachable tire the combination of a rim having its edges bent substantially as shown, with a tire sheath having external beads near its edges for engagement beneath the overhanging edges of the rim, the inner walls of the edges of said sheath being inclined toward the rim, a locking strip having a groove in its inner face to accommodate the spoke fastening devices, the sides of said strip tapering toward the rim, and an inflatable core, substantially as and for the purpose specified.

734,916. Pneumatic Tire and Rim. Arthur H. Marks, Akron, Ohio. Filed May 2, 1902. Serial No. 105,575. (No model.)

Claim.—The combination of a trough shaped metallic rim having outwardly extended side flanges, an annular metal tire which fits upon said flanges and spans the space between them and is provided midway between its edges with an external circumferential rib, and two retaining rings bolted to the sides of said rim and extending well beyond the same and provided on their outer edges with inwardly turned flanges, with a tire sheath having beaded edges which fit the spaces inclosed by said metal tire, its circumferential flange and said retaining rings.

734,915. Pneumatic Tire. Arthur H. Marks, Akron, Ohio, assignor to the Diamond Rubber Company, Akron, Ohio, a corporation of West Virginia. Filed April 2, 1902. Serial No. 101,100. (No model.)

Claim.—In a detachable double tube pneumatic tire, the combination of a wheel rim provided with a centrally arranged peripheral flange, plates removably secured to said rim extending along the sides of the same and bent inwardly to form flanges, the peripheries of the flanged portions of said plates being in substantially the plane of the outer surface of the peripheral rim flange, a tire sheath having ribs or beads adapted to fit within the recesses formed between said peripheral rim flange and the flanges of the plates, and an inflatable tube within said sheath, substantially as described.

734,921. Driving Mechanism for Transmitting Variable Speeds. William Meischke-Smith and Georgius F. Meischke-Smith, Paris, France. Filed Dec. 1, 1902. Serial No. 133,485. (No model.)

Claim.—1. In driving mechanism for transmitting variable speeds, a crank, a block arranged therein and carrying a crank pin, a screw coacting with the block, geared members, mechanism connecting the geared members with the screw, and means for

holding either of the members stationary to the exclusion of the other.

735,015. Manufacture of Electric Igniters. Albert De Dion and Georges Bouton, Puteaux, France. Filed Sept. 10, 1902. Serial No. 122,862. (No model.)

Claim.—An electric igniter comprising a longitudinally bored core of insulating material, a bottom of conducting material, a metallic solder uniting the parts, and a conductor passing freely through the bore of the core and united to the bottom by the solder which joins said bottom to the core.

735,021. Steam Generator. Frank E. Stanley and Freelan O. Stanley, Newton, Mass., assignors to the Stanley Automobile Company, a corporation of New-York. Filed Dec. 6, 1898. Serial No. 698,448. (No model.)

Claim.—The combination with a steam generator, of a burner for heating the same having a chamber to receive a mixture of vapor and air, a continuous oil supply pipe leading to the burner and passing through the water space of the generator, and a valve in said pipe between the generator and burner, substantially as described.

735,029. Governor Mechanism for Explosive Engines. William J. Wright, Pittsburgh, Penn., assignor of three-sixteenths to J. W. Lee and Fred J. Galloway, Pittsburgh, Penn. Filed Feb. 26, 1902. Serial No. 95,706. (No model.)

Claim.—The combination with the mixing chamber, the tube 2 communicating with said chamber, having air intakes, said tube having a gas or gasoline feed, a hollow valve slidable in the tube, and having an outlet discharging in the tube at the air intake end, said tube having a valve seat, the valve having a seat for co-operating with the tube valve seat, and inlets at a point below its seat, and means connected with the valve and geared with the engine shaft controlled by the varying speed of the engine, for shifting the valve to increase or decrease the flow of gas or gasoline therethrough, as set forth.

735,035. Gas Engine. William H. Jones, Cambridge, Mass. Original application filed Nov. 13, 1902. Serial No. 129,843. Divided and this application filed Jan. 6, 1903. Serial No. 138,027. (No model.)

Claim.—In a gas engine of the character described, a plurality of cylinders, each provided with an intake valve, an exhaust valve, a piston and connecting rod; the gear case; the crank shaft; the distributing box provided with the concentric outer and inner walls and surrounding the crank shaft; pipes rigidly connected with and extending from the said box; pipes connected at one end with the passage to the intake valve; and the pipe surrounding and having a slip joint connection with the adjacent ends of the pipes substantially as and for the purpose set forth.

735,036. Igniter for Explosive Engines. William H. Jones, Cambridge, Mass. Original application filed Nov. 13, 1902. Serial No. 129,843. Divided and this application filed Jan. 7, 1903. Serial No. 138,143. (No model.)

Claim.—In a gas engine of the character described, the crank shaft and the gear 11 mounted thereon; the cam gears 12 mounted on studs, and in engagement with the gear on the crank shaft, and corresponding in number with the number of the cylinders; a disk of insulating material mounted on and rotating with one of the cam gears and formed on its periphery with notches corresponding in number with the number of the

cylinders; the bell crank 19 of insulating material mounted on an extension of one of said studs and independent of the cam gear; a metallic arm pivoted to said bell crank and provided with a suitable roller; means for holding said arm with its roller against the periphery of said disk; an electrical contact mounted on the bell crank and adapted to contact with said metallic arm when its roller is in a notch, and to be out of contact therewith when said roller is lifted out of a notch; electric wires forming a circuit and connected respectively with said contact and the metallic arm; and an operating lever for imparting rotation to the bell crank, substantially as described.

735,068. Speed Changing Mechanism. John D. Curtis, Worcester, Mass. Filed January 12, 1903. Serial No. 138,624. (No model.)

Claim.—1. In a speed changing mechanism, the combination of two shafts, suitable bearings therefor, a series of differentially proportioned intermeshed gears mounted upon and connecting said shafts, the gears on one shaft rigidly keyed thereto, the gears on the other shaft free and provided internally with notches or keyways, the latter shaft formed hollow and provided with a slot, rings surrounding the shaft between the gears, an endwise movable member sliding within said hollow shaft, a swinging latch fitted within a cavity in said member and pivoted to swing outward through said slot, a wedge block slidable beneath said latch, a rod connected with said block and extending out through said shaft member, and means for moving said member and for relatively moving said wedge block, for the purpose set forth.

735,213. Electrical Igniting Apparatus. Walter H. Cotton, Chicago, Ill., assignor to Albert Kunze, Chicago, Ill. Filed February 28, 1902. Serial No. 96,108. (No model.)

Claim.—1. In an igniting apparatus for explosive engines, in combination, an explosion chamber, a pair of sparking chambers, electrodes in each chamber, a tube connecting the sparking chambers, a nipple providing communication between the tube and the explosion chamber, a valve for opening communication between the explosion and the sparking chambers in alternation, and means for creating a spark at the electrodes in the chamber in communication with the explosion chamber.

735,256. Starting Mechanism for Oil or Gasoline Engines. Feodor C. Hirsch, New York, N. Y., assignor to Abbot Augustus Low, Horseshoe, N. Y. Filed February 28, 1902. Serial No. 96,033. (No model.)

Claim.—1. In combination with an explosive engine, a tank for storing gases under pressure, the valve shaft, and the two independent splines, a starting valve arranged to admit the compressed gas from said tank to the engine cylinder, and means carried by a continuously rotating valve driving shaft for operating and controlling said valve through the medium of the cam shaft of the engine, substantially as set forth.

735,265. Detachable Tire. Herbert E. Irwin, Galesburg, Ill., assignor to Irwin Rubber Company, Chicago, Ill., a corporation of Illinois. Filed March 31, 1903. Serial No. 150,378. (No model.)

Claim.—1. The combination with a wheel rim provided with a peripheral channel having overhanging sides, of a tire casing split on its inner side and provided with marginal flanges or lips, each of said flanges having on its outside a bead adapted to lie under the overhanging sides of the rim and having on its inside opposite said beads surfaces which form between themselves a substan-



tially V or trough shape, and an inner air tube provided with a fabric strip which in turn secures a ring or band, thus forming a rib on the base of the air tube, which lies in the said trough bottom of the tire casing, substantially as and for the purpose described.

735,329. Vehicle Wheel. Reuben O. Wilcox, Wichita, Kan. Filed February 24, 1903. Serial No. 144,809. (No model.)

Claim.—1. A wheel having springs on the inner side of its rim provided with volute arms, the ends of which are normally spaced from the intermediate portions of the springs and are free to move toward and from the same, and spokes attached to the intermediate portion of said volute spring arms, substantially as described.

735,370. Motor Vehicle. Robert H. Hassler, Indianapolis, Ind. Filed January 15, 1901. Renewed January 13, 1903. Serial No. 138,829. (No model.)

Claim.—1. In a motor vehicle, a body, a supporting truss containing journals, driving shafts running in the journals and actuating the vehicle wheels and driven by means of a gear wheel, an electric motor secured to the truss, a pinion on the motor shaft engaging with the gear, springs supporting the body on the truss, and a cross spring having one portion attached to the body and other portions attached to the ends of the first mentioned springs.

735,373. Vehicle Tire. Charles L. Henderson, Berlin, Canada. Filed October 20, 1902. Serial No. 128,007. (No model.)

Claim.—1. In a tire for vehicles, the combination with the rim having side walls forming a channel, of a tread located between said side walls, and bodily movable inwardly between said side walls and side rings fitting in grooves in one of said parts and contacting with the abutting surfaces of the other part, substantially as described.

735,376. Crude Oil Vaporizer. Franklin G. Hobart, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois. Filed March 1, 1901. Serial No. 49,397. (No model.)

Claim.—1. A generator for forming hydrocarbon gas, comprising a heat tube, a downward extension upon said heat tube, a vaporizing chamber entirely surrounding said heat tube, a septum or partition in said heat tube, forming passages on opposite sides of said partition, and a valve located at the upper end of said heat tube, constructed to regulate the passage of the heat downward at one side of said partition and

thence to its outlet, substantially as described.

735,441. Apparatus for Burning Oil. George L. Badger, Quincy, Mass., assignor to Equitable Auto-Truck Power and Burner Company, Lynn., Mass., a corporation of Maine. Original application filed August 2, 1900. Serial No. 25,713. Divided and this application filed September 28, 1900. Serial No. 31,420. (No model.)

Claim.—1. In apparatus of the character described, a main burner and an auxiliary burner, each adapted to receive a separate supply of vapor and air, an oil vaporizing receptacle adapted to receive a supply of oil or hydrocarbon and to furnish a supply of vapor to each of the burners, said vaporizing receptacle arranged to receive the direct heat of the flame from the auxiliary burner, means to effect the supply of air to said main burner in the form of a plurality of fine jets, a group of injector nozzles communicating with said main burner and adapted to co-operate respectively with each of said plurality of jets, to furnish a supply of air to said burners, means whereby the amount of vapor supplied to each burner, and the amount of vapor supplied by each of the jets may be adjusted relatively to each other, and means whereby the amount of vapor supplied to each burner may be regulated and the supply to the main burner cut off, while the supply of the auxiliary burner is maintained, substantially as set forth.

735,505. Charging Device for Electromobiles. Caryl D. Haskins, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York. Filed December 4, 1900. Serial No. 38,689. (No model.)

Claim.—1. A vending device for electric energy, comprising a closed casing containing leads to electric supply mains, circuit terminals within the same adapted for connection with a battery to be charged, said terminals being normally inaccessible, and toll controlled mechanism for rendering the terminals accessible.

735,550. Electric Steering Gear. Wilbur L. Merrill, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York. Filed April 18, 1903. Serial No. 153,201. (No model.)

Claim.—1. The combination of a motor, a series of contacts, brushes geared to said motor and adapted to move over said contacts when the motor armature rotates, means for charging a greater or less number of said contacts, and means dependent upon the position of said brushes and of the charged contacts for varying the motor connections.



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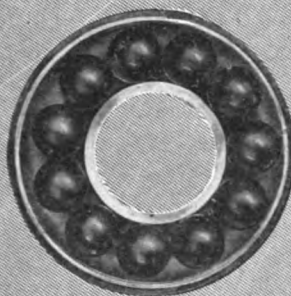
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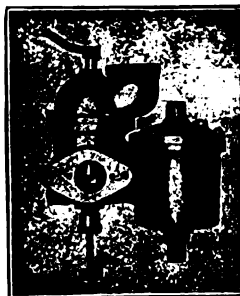
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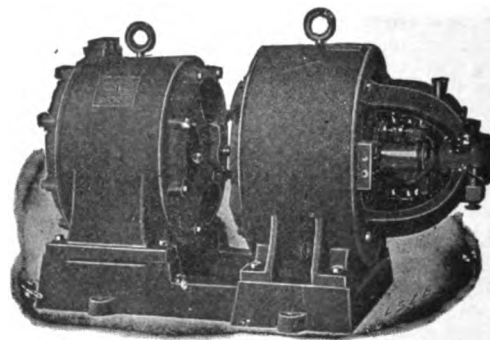
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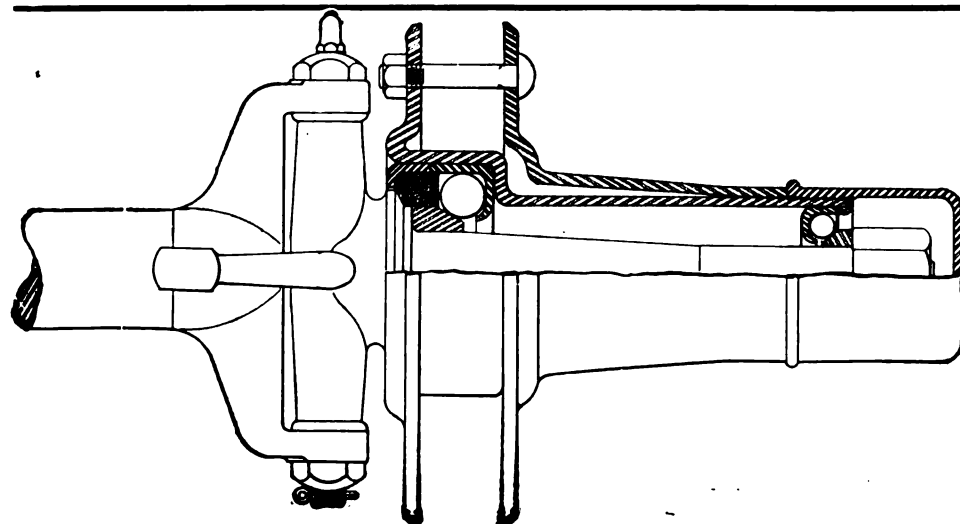
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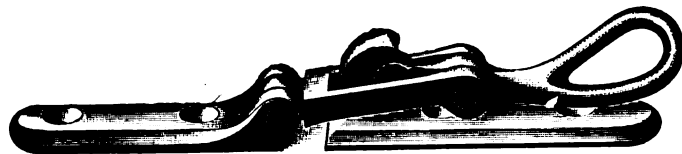
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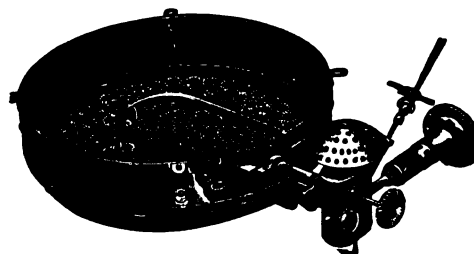


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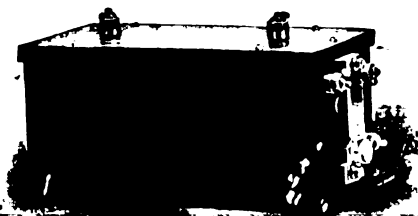
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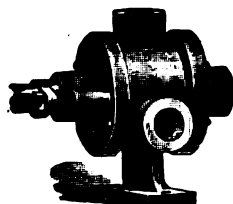


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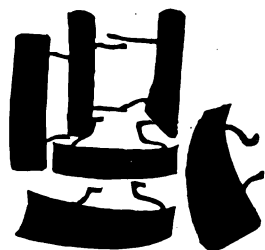


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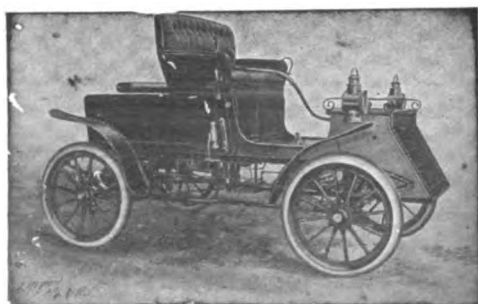
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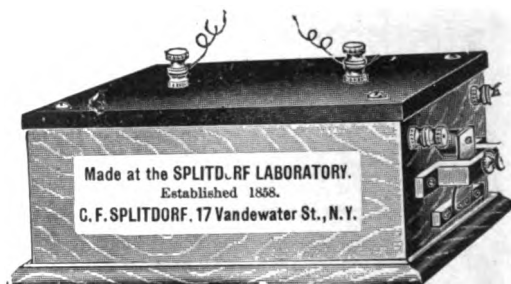
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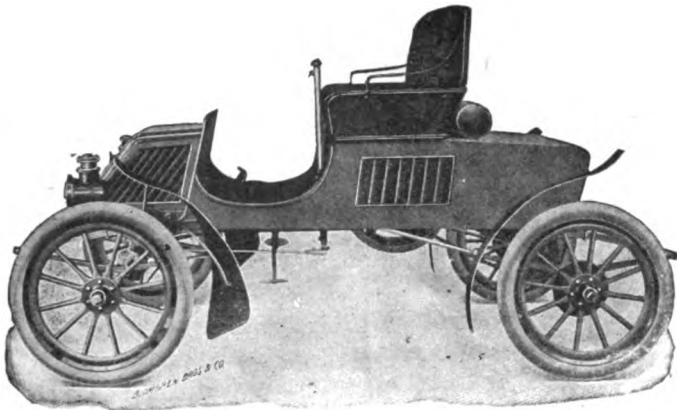
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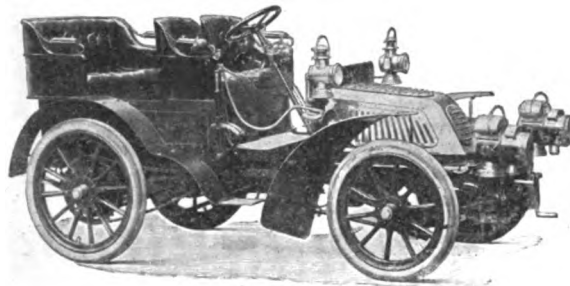
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# \$10,000 REWARD!

It has come to our notice that representatives of other manufacturers who are interested in a transcontinental automobile enterprise are freely circulating a story to the effect that the performance of the 20-horsepower WINTON TOURING CAR in successfully transporting Dr. Jackson and Mr. Croker from San Francisco to New York City is not as represented. They allege that Dr. Jackson purchased and used two cars on the trip and at times found it necessary to load the car on a railroad train to get it over rough spots and sand.

We avail ourselves of this opportunity to emphatically deny every statement of this malicious character and hereby offer a reward of

## Ten=Thousand Dollars

to anyone who will prove that Dr. Jackson used other than the one car for his entire journey of over 5,000 miles, or that he was forced to resort to a railroad train at any stage of his ride over mountains, desert and plains from the Pacific coast to the Atlantic ocean. He made the trip purely for pleasure and was not accompanied by a corps of expert factory mechanics. Nor did he have relays of duplicate parts and supplies at frequent points along the route.

*SEND FOR BOOKLET ILLUSTRATING AND DESCRIBING DR.  
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ARTILLERY WOOD or WIRE.

**GET WITH US.**

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# \$25,000 REWARD!

Last week we offered \$10,000 to anyone who could produce the slightest evidence showing truth in any of the various malicious stories told by the "anvil chorus" about Dr. H. Nelson Jackson and his successful transcontinental ride with a WINTON TOURING CAR. To date no one has appeared to claim the reward. The attacks upon Dr. Jackson's honor have pleased him no more than they have us, and he has authorized us to add \$15,000 to our original reward, so we raise the amount and now offer

## Twenty-Five Thousand Dollars.

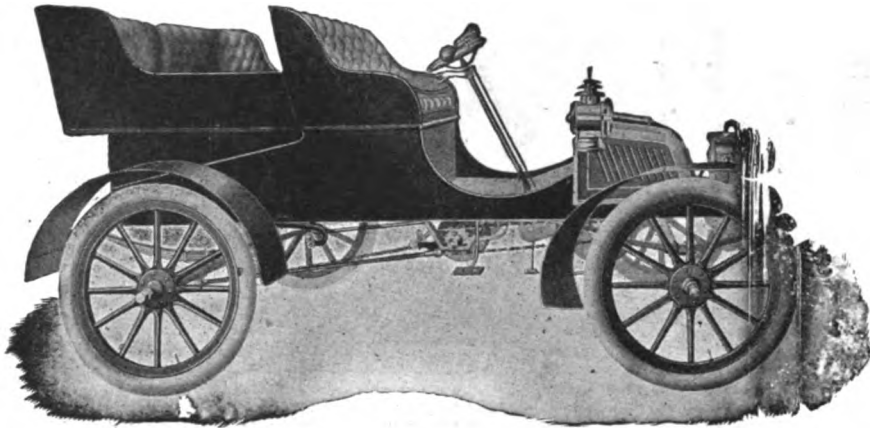
This amount we will pay to anyone proving that at any time on his journey across the continent conditions of transportation were other than represented by Dr. Jackson.

Dr. Jackson's great triumph with his regular model Winton is a bit discomfiting to some others interested in transcontinental "stunts," especially when it is considered that he is not a mechanic, nor was he accompanied by a factory mechanic, or met at frequent intervals en route by factory mechanics with parts and supplies of all kinds. But the fact remains that aside from showing himself a clever amateur sportsman and a good automobilist he demonstrated beyond question that the WINTON TOURING CAR is the best automobile for long distance touring manufactured or sold in America.

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# **NOTICE**

**To Manufacturers, Dealers, Importers,  
Agents and Users of**

# **GASOLENE AUTOMOBILES**

United States Letters Patent No. 549,160, granted to George B. Selden, Nov. 5, 1895, controls broadly all gasolene automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following-named importers and manufacturers:

Electric Vehicle Co.  
Winton Motor Carriage Co.  
Packard Motor Car Co.  
Olds Motor Works.  
Knox Automobile Co.  
The Haynes-Apperson Co.  
The Autocar Co.  
The George N. Pierce Co.  
Apperson Bros. Automobile Co.  
Searchmont Automobile Co.  
Locomobile Co. of America.  
The Peerless Motor Car Co.  
U. S. Long Distance Automobile Co.

Pope Motor Car Co.  
J. Stevens Arms & Tool Co.  
H. H. Franklin Mfg. Co.  
Charron, Girardot & Voigt Co. of America  
(Smith & Mabley).  
The Commercial Motor Co.  
Berg Automobile Co.  
Cadillac Automobile Co.  
Northern Mfg. Co.  
Pope-Robinson Co.  
The Kirk Mfg. Co.  
Elmore Mfg. Co.  
E. R. Thomas Motor Co.

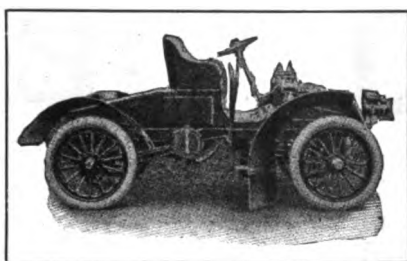
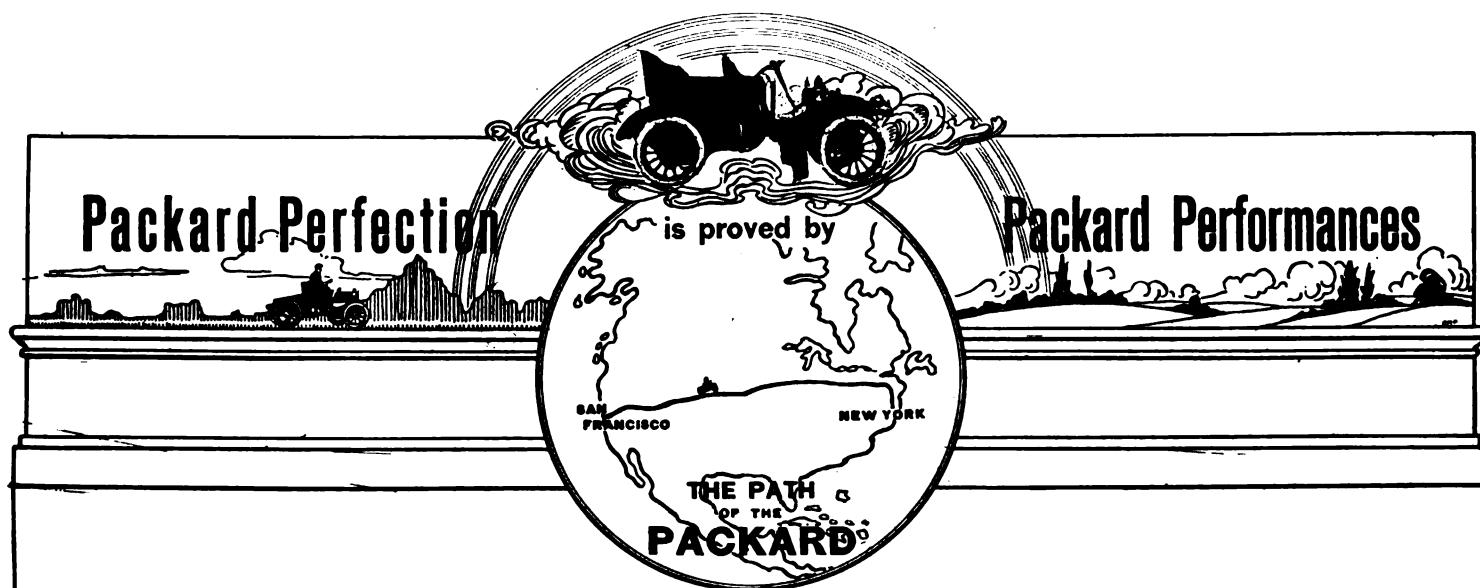
Waltham Manufacturing Co.

These manufacturers are pioneers in this industry and have commercialized the gasolene vehicle by many years of development and at a great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacturers. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasolene automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturers or importers will be liable to prosecution for infringement.

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ALL automobilists will make the first mile about alike.

The outward resemblance between the car with a record and the untried experiment is so close that it becomes very difficult for the uninitiated to detect the difference.

It is the kind of work that a car will do after two or three thousand miles of use which interests the average purchaser, and for this reason we planned our Overland journey from San Francisco to New York, not only to demonstrate that what had never been accomplished by any other automobile could be done by a Packard, but to crowd into less than two months more severe usage by twenty times than would ever be ordinarily put upon a motor car in the course of its total existence.

It has been our aim and practice from the start to make public every detail of each day's run that all who were interested might have a gauge with which to measure the almost limitless possibilities for endurance, power and reliability of the standard Model F Packard. There has been no attempt to conceal the slightest detail. Last week we gave the itinerary from San Francisco to Omaha. Below will be found the route and schedule continuing eastward to Batavia, N. Y. We will follow this with other data of even greater importance.

#### ROUTE AND SCHEDULE.

<p><b>NEBRASKA.</b> Left Omaha, August 2. <b>IOWA.</b> Arrived Atlantic, August 2. " Adair, August 3. " Des Moines, August 4. " Marengo, August 6. " Wheatland, August 7.</p>	<p><b>ILLINOIS.</b> Arrived Dixon, August 8. " St. Charles, August 9. " Chicago, August 10. <b>INDIANA.</b> Arrived South Bend, August 11. <b>OHIO.</b> Arrived Bryan, August 12.</p>	<p>Arrived Norwalk, August 13. " Cleveland, August 14. " Jefferson, August 15. <b>NEW YORK.</b> " Fredonia, August 16. " Batavia, August 17.</p>
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**THE PACKARD MOTOR CAR COMPANY,**  
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All roads  
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# THE OLDSMOBILE



ACROSS  
THE CONTINENT IN AN  
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THE FIRST AND ONLY RUNABOUT  
TO SUCCESSFULLY COMPLETE  
THE TRIP.

The Oldsmobile transcontinental trip is the most wonderful automobile journey ever made. From San Francisco to New York, over mountains, across deserts, through sand and mud, the Oldsmobile won its way, surmounting every difficulty and proving to the world it is "built to run and does it."

By this remarkable trip the Oldsmobile demonstrates its equality with the high-priced touring car. Twenty-three years experience in the manufacture of gasoline engines enables us to make a perfect motor. Simplicity is the keynote of the entire mechanism, and it is this perfect mechanical construction which leaves "Nothing to watch but the Road," and which made possible this runabout's wonderful trip from the Atlantic to the Pacific.

**PRICE, \$650.00.**

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COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
DETROIT, MICH.—Oldsmobile Co.  
ERIE, PA.—Jacob Roth Auto Co.  
GRAND RAPIDS, MICH.—Adams & Hart.  
GREENVILLE, S. C.—Bates-Tannahill Co.  
HARRISBURG, PA.—Kline Cycle Co.  
HOUSTON, TEXAS—Hawkins Automobile & Gas Engine Co.  
INDIANAPOLIS, IND.—Fisher Automobile Co.  
JACKSONVILLE, FLA.—F. E. Gilbert.  
KANSAS CITY, MO.—E. P. Moriarty & Co.  
KNOXVILLE, TENN.—Rodgers & Co.  
LANSING, MICH.—W. K. Prudden & Co.

LITTLE ROCK, ARK.—Arkansas Auto Co.  
LOS ANGELES, CAL.—Oldsmobile Co.  
LOUISVILLE, KY.—Sutcliffe & Co.  
MEMPHIS, TENN.—White & Williams.  
MILWAUKEE, WIS.—Oldsmobile Co.  
MINNEAPOLIS, MINN.—A. F. Chase & Co.  
NASHVILLE, TENN.—John W. Chester Co.  
NEWARK, N. J.—Autovehicle Co.  
NEW ORLEANS, LA.—Abbott Cycle Co.  
NEW YORK CITY, N. Y.—Oldsmobile Co.  
OMAHA, NEB.—Olds Gas Engine Works.  
PASADENA, CAL.—Ed. R. Braley.  
PATERSON, N. J.—F. W. Stockbridge.  
PHILADELPHIA, PA.—Oldsmobile Co. of Philadelphia.  
PITTSBURG, PA.—Banker Bros. Co.  
PLAINFIELD, N. J.—F. L. C. Martin Co.  
PORTLAND, ORE.—Merrill Cycle Co.  
POUGHKEEPSIE, N. Y.—John Van Benschoten.  
RALEIGH, N. C.—Raleigh Iron Works.  
ROCHESTER, N. Y.—Rochester Automobile Co.  
SAGINAW, MICH.—A. W. Norris.  
SAN FRANCISCO, CAL.—Pioneer Auto Co.  
SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.  
ST. MICHAEL, I. T.—McIntyre & De Long Motor Car Co.  
SYRACUSE, N. Y.—Syracuse Auto Co.  
TEXARKANA, ARK.—Texarkana Auto & Repairing Co.  
TUCSON, ARIZ.—F. Ronstadt.  
UTICA, N. Y.—C. H. Childs & Co.  
WASHINGTON, D. C.—National Capital Auto Co.  
HAWAIIAN ISLANDS—R. H. Halstead, Honolulu.

## FOREIGN LIST OF AGENCIES.

GREAT BRITAIN & IRELAND—Charles Jarrott & Letts, Ltd., 45 Great Marlborough St., London, England.  
GERMANY—(All Germany except Cologne)—E. Earnest Weingaertner, Berlin; Cologne, L. Walter & Co.  
FRANCE—Eugene Merville, Paris.  
SWITZERLAND—Automobile Fabrik Orion AG., Zurich.  
ITALY—Victor Crolzat, Turin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
RUSSIA—Th. Thansky & Co.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingley & Co., Johannesburg and New York.  
NEW SOUTH WALES—Knowles Auto. & Power Co., Sydney.  
VICTORIA—Hall & Warden, Melbourne.  
QUEENSLAND—James Smith & Sons, Brisbane.  
SO. AUSTRALIA—Duncan & Fraser, Adelaide.  
WEST AUSTRALIA—American Motor Car & Vehicle Co., Fremantle.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
JAPAN—Bruhl Bros., Yokohama and New York.  
ASIA MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

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Members of the Association of Licensed Automobile Manufacturers.

# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, September 3, 1903.

No. 23

## JEFFERY AND SELDEN

**Kenosha Maker Announces a New Car and Lets  
Fall Some Remarks Bearing on his Much  
Discussed Attitude.**

There will be a Rambler touring car on the market next year. When he was in New York last week Thomas B. Jeffery, the head of the well known firm bearing his name, admitted the fact, which, indeed, is now public property, since Jeffery & Co. are advertising for workmen skilled in the construction of large cars.

This foreshadow of a big Rambler is of more than usual significance and portent. Ever since the Selden patent and the Association of Licensed Automobile Manufacturers were brought to bear on the industry, the Jeffery attitude has been one of keen interest to the trade in general. As one of the firms whose reputation and commercial and financial standing are beyond question, the fact that Jeffery & Co. have not entered the Selden fold has been the "talk of the trade" from one end of the country to the other, and has given rise to all manner of speculation and interpretation.

And while tongues have wagged, Mr. Jeffery himself has remained silent. When his attitude has been discussed and efforts made to "draw him out," he has been prone to smile. Mr. Jeffery has a quiet, nervous sort of smile, and an easy but nervous manner of speech—when he speaks, which is not often, nor is his speech of great length. But he is a splendid listener and an equally splendid smiler. The smile may mean much or it may mean little—it differs with individual interpretation. About all any one has ever learned regarding his attitude toward the Selden patent has been what appeared an opinion that he was neither for nor against it. He has frankly admitted that the association of Selden licensees was capable of much good. Similarly he has permitted it to be inferred that it might be capable of some things not so good, or that it might be projecting itself into matters not exactly within the realm of a purely patent-bound organization.

When his announcement of a Rambler tour-

ing car was persuasively remarked by a Motor World man Mr. Jeffery smiled. When he was asked point blank whether it had any bearing on the existing situation he smiled again.

"The large car may be necessary for the protection of my agents," he finally responded. And he said "may be," not "will be necessary." He allowed the inference to fall where it might.

Mr. Jeffery, as nearly every one knows, is a seasoned warrior so far as concerns patent litigation. As pioneer builders of bicycles, he and his then partner, the late R. P. Gormully, waded early and often and long and up to their necks in the intangible gore of a dozen patent battles. They cut right and left, even after others had capitulated, and the defeats they sustained were very few and very far between. They upset a couple of so-called master patents and made it possible for any one to build bicycles who cared to build them. The fact is historic, and though a quiet little man with a smile that betokens almost anything, Mr. Jeffery is in consequence known to be an experienced fighter whom none dare despise, and who does not shirk battle when it is offered.

Some of his former battles chanced to be reminiscently remarked by the Motor World man. It was plain that he relished the recollections that were stirred. They led him to let fall what appeared to be in his mind, and what is full of significance in the light of conditions as they now prevail in the automobile trade.

"A patent license is a more serious thing than most people imagine," he said. "Come what may, it binds one hand and foot. It usually costs a great deal less to get one than it does to get rid of it, should things occur that make it desirable to get rid of it. Why, when we wanted to get rid of the Pope license in the bicycle business it cost us I can't just recall how much money, but it was a pretty expensive proceeding, I can assure you."

This was a long speech for Mr. Jeffery. As quick as it was ended, he was asked if it betokened that he would take out a Selden license if he could name certain conditions. Mr. Jeffery was taken back by the query and more than smiled. He laughed and shook his head good naturedly as he laughed—shook it, not negatively nor affirmatively, but as if he rather enjoyed the audacity of a question that had struck the target squarely.

## DAY AND CHAMBERLIN

**Selden Chief "Goes for" the Chicago Lawyer  
and the Latter Makes Brief Retort—  
Selden Himself Also Talks.**

The developments of the week in the situation between the Licensed Association of Automobile Manufacturers and the Independents, who are now being grouped for defence, have been largely personal, yet interesting.

Some strong retorts were drawn out from the National Association of Automobile Manufacturers by the announcement made exclusively in the Motor World of last week concerning the plans of W. H. Chamberlin, of Chicago, formerly Assistant Commissioner of Patents at Washington, to organize the independent makers for a fight against the Selden patent, and, through the agency of the Patent Title and Guarantee Company, to indemnify independent makers against unfavorable judgments handed down by the courts.

After making the announcement of his purpose, Mr. Chamberlin left New York and went to Atlantic City. That was last Thursday.

George H. Day, general manager of the Licensed Association, called upon for an expression of opinion, was jauntily defiant. Mr. Chamberlin had said that he would call the bluff of the association, but Mr. Day said the association did not scare worth a cent. Concerning Mr. Chamberlin Mr. Day gave out a statement, and said it was made with the advice of counsel. In part this statement was as follows:

"Mr. Chamberlin came to me about two months ago with a proposition that the Association of Licensed Automobile Manufacturers should give him an annual retainer in consideration of his not appealing a certain case, which one of his clients did not wish to spend more money on. He seemed to think that the decision was of great value to the association as it stood, but if no retainer arrangement could be made with us, he contemplated getting a group together who would employ him to carry his case to the Supreme Court.

"The executive committee did not see the



matter in the same light, and declined to make any arrangement with Mr. Chamberlin. He remarked at that time that it would not be long before the association would regret this, and would be paying him a much larger retainer than he then asked.

"About three weeks ago Mr. Chamberlin called at my office and stated that he had discovered a patent so classified in the Patent Office that it would not be likely to be discovered in any search made for an anticipation of the George B. Selden patent, No. 549,160, but that, in his opinion, it was in fact a pure anticipation. He suggested that the association should give him an annual retainer covering a period or until such a time as this patent should be set up in an answer in a suit under the Selden patent, and that, if he was not employed under retainer, he should feel that with such information in his possession it would be his duty to interest those not members of the association in a defence against the patent, which, it would seem he is now attempting to do.

"When Mr. Chamberlin disclosed this patent it was discovered that it had been considered by the attorneys of the Electric Vehicle Company before that company made any definite arrangements with Selden under his patent, and that later it was set up in the answer of both the Winton Motor Carriage Company and the Buffalo Gasolene Motor Company in the suits brought against them by the Electric Vehicle Company. In view of these facts the association again were unable to see that it was for their interests to retain the services of Mr. Chamberlin, and, furthermore, the patent in question is considered of no importance."

Mr. Day added: "If you understood this association thoroughly you would appreciate the fact that it is a beneficial organization, not only for the licensees, but also for the public and for the outside makers, as well. Yes, it is a fact, and I can show you documentary evidence to prove it, that any one to whom we refuse a license is better off without it. It is saving them money to refuse them. There is nothing about this organization that is not open and above board. You can shower me with questions and I am free to answer every one."

"Well, Mr. Day, is it not true that the doors of the association are very nearly closed?"

"The doors never will be closed."

"To put it the other way, then, are the doors wide open?"

"No, they are not, and there is no reason why they should be. We are protecting ourselves and our property, representing a great deal of capital and brains, against persons who have no idea of benefiting the industry, but are willing to take the benefit of what others have done."

"Is it true, Mr. Day, as Mr. Chamberlin says, that no final hearing ever has been had in a Selden patent case, and that all cases have been closed by consent, after adverse ruling on demurrers?"

"Here is a history of the Selden patent cases in court in full. We do not claim any more than this. It is true there never has

been a final hearing, but it was enough for the Winton company and others to go as far as they did. They were willing then to pay royalty."

The history of the Selden suits, handed out by Mr. Day, as he spoke, is interesting at the present time, as showing the dispositions that have been made of the various cases. This is the summary:

"United States Court, Southern District of New York.—Electric Vehicle Co. and George B. Selden vs. Winton Motor Carriage Co., Percy Owen and A. W. Chamberlin: July 13, 1900, bill of complaint filed; September 3, 1900, demurrer setting up invalidity of patent filed; November 9, 1900, opinion filed by Judge Coxe overruling demurrer; November 12, 1900, order of Judge Coxe overruling demurrer filed; March 20, 1903, consent final decree upon pleadings and proofs of Judge Lacombe sustaining patent, holding that defendant had infringed Claims 1 and 2, and granting an injunction restraining such infringement.

"United States Circuit Court, Western Division of New York.—Electric Vehicle Co. and George B. Selden vs. Buffalo Gasolene Motor Co.: July 12, 1900, bill of complaint filed; September 3, 1900, demurrer filed; November 30, 1900, order of Judge Hazel overruling demurrer. Same disposition of the case as in the Winton case.

"United States Circuit Court, Southern District of New York.—Electric Vehicle Co. and George B. Selden vs. Automobile Forecarriage Co.: December 27, 1900, bill of complaint filed; May 29, 1901, decree pro confesso for failure to answer entered sustaining patent and claims thereof, holding the defendant infringed, and granting an injunction and accounting.

"United States Circuit Court, District of Vermont.—Electric Vehicle Co. and George B. Selden vs. Charles T. Ranlet and Daniel N. Ranlet, doing business under the firm name and style of the Ranlet Automobile Co.: January 10, 1901, bill of complaint filed; May 21, 1901, consent final decree of Judge Wheeler entered, sustaining Claim 1, 2, 3, 4, 5 and 6 of the patent, adjudging infringement thereof by the defendant, Charles T. Ranlet, and granting a perpetual injunction.

"United States Circuit Court, Southern District of New York.—Electric Vehicle Co. and George B. Selden vs. Albert D. Smith and Carleton R. Mabley, composing the co-partnership trading as Smith & Mabley: January 17, 1903, bill of complaint filed; April 15, 1903, supplemental bill filed substituting Charron, Girardot & Voigt Co., of America, as defendant in place of Smith & Mabley; April 15, 1903, consent decree of Judge Lacombe entered sustaining the patent, holding that the first and second claims had been infringed by the defendant and granting a perpetual injunction."

Concluding the interview, Mr. Day said: "This is the third attempt that has been made to organize an opposition, and they have all failed. Who has Mr. Chamberlin got? I know one man he has not got, and he is the biggest man outside the association. He is going to insure against damages. Can he insure against an injunction? That is what counts."

Mr. Day then handed over a statement made by George B. Selden, the original owner of the patent. This statement is as follows:

"No guarantee," said Mr. Selden, "can be given by any individual firm or corporation against an injunction of a federal court. The proposition of the opposition is silent on this subject—it only extends to damages. No defendant relying on such a supposed guarantee could be certain that his business could not be stopped summarily by such an injunction. Then he could only collect damages to the amount of the policy issued to him, while his investment beyond that would be lost.

"We have now six good and sufficient grounds on which the court would award an injunction, viz., five decrees and the public acquiescence—from 90 to 95 per cent of the trade having taken licenses under my patent—any one of which six facts is considered by the courts as sufficient basis on which to rest the injunction order. In truth, on a motion for a preliminary injunction on my patent as it now stands, the only question the court would consider would be that of infringement, and on this question all parties have agreed that it is impossible to build a gasolene automobile without infringing. On such a motion a defendant could not be heard to raise any question except that of infringement. He could not argue that the patent was anticipated or invalid for any other reason. This is a common rule of law—the courts will not waste their time by permitting the discussion of matters already thoroughly settled by their decisions.

"There is nothing new or formidable in the alleged anticipation which is now brought forward by the opposition. I have known of the patent in question for many years, and it was fully discussed by the Patent Office authorities before my patent was issued. It was also considered by the counsel for the Electric Vehicle Company before they acquired a license from me, and it figured without avail in several of the suits which have been decided in my favor. It is for a steam carriage of no particular merit or novelty at its date, and of a type which has never come into use, although the patent has long since expired.

On Monday, when Mr. Chamberlin returned to New York, he was seen and asked what he had to say to Mr. Day's statements and insinuations. He promptly said that "Mr. Day must have been angry when he spoke so. I never have done anything unprofessional." He further said that he would make a statement the next day. On Tuesday Mr. Chamberlin was cheerful, but reticent with a big "R." He had adopted the policy of "I have nothing to say." He gave out a brief typewritten statement, and declined to discuss the subject further. The only remarks elicited in reply to questioning were: "Personalities in the papers do not pay," and "We propose to fight this out in the courts, and not in the papers." His statement was as follows:

"On my return from Atlantic City my attention has been called to the interview with Mr. Day in last week's papers.

"So far as my talk with him some two or three months ago, about appealing a case, I think it is only necessary for me to say that my action at that time was with the full knowledge and approval of my client in the case referred to.

"As to my interview with Mr. Day about three weeks ago, there was a perfect understanding between us that if I was not retained by his association I would be perfectly free to accept a retainer for the defence in any litigation, under the Selden patent."

The manner of Mr. Chamberlain, rather than anything he said, suggested that the statements of Mr. Day might figure in some action in the courts.

## I. A. WESTON GOES UNDER

### Involuntary Bankruptcy Petition Filed Against Them—Liabilities Placed at \$34,000.

A petition in involuntary bankruptcy was filed in the United States District Court at Utica, N. Y., on Tuesday, September 1, against the I. A. Weston Co. of Syracuse, N. Y., manufacturers of automobile and bicycle wheels, rims, steering devices, etc. The petitioning creditors and the respective amount of their claims are the Central City Brass Mfg. Co., \$412.93; C. W. Snow & Co., \$146.84; the Syracuse Supply Co., Ltd., \$167.71. Harry H. Farmer is attorney for the petitioners.

Rumors that the company was in financial difficulties had prevailed for several days before this action was taken, and the company's factory at Jamesville, N. Y., closed down about a week previous. In addition to the factory, the company has a small shop in Syracuse.

A statement of the company's condition is being prepared. The liabilities are roughly estimated at \$34,000, which is the amount at which the company is capitalized. No estimate of the assets is at present available.

The I. A. Weston company was formed about seven years ago by Mr. Weston and Frank Land, who continued in control until two years ago, when H. Romeyn Smith bought Land's interest. The officers of the company are I. A. Weston, president; H. Romeyn Smith, secretary and treasurer.

### Want General Co. Bankrupted.

Following upon the appointment of a receiver for the General Automobile and Manufacturing Company, Cleveland, Ohio, as related last week, proceedings have been commenced to throw the concern into bankruptcy. Attorneys for the Whiteley Steel Company, Muncie, Ind.; the John F. McCanna Company, Chicago, and G. H. Slatmyer, Cleveland, took this action last week, and seek to have a receiver appointed.

They state that the company admits an indebtedness of nearly \$60,000, and will certainly not be able to pay 100 cents on the dollar, and that it is undoubtedly advisable that the estate should be administered through the United States courts, rather than through the State courts, as would follow under the original proceedings. They add that the concern has in process of manufacture some twenty-five automobiles, which can be finished at small cost, and should be, as they would then meet with a ready sale.

### Proceedings Against Milwaukee Concern.

Three of the largest creditors of the National Automobile and Motor Company, Milwaukee, Wis., last week filed a petition in involuntary bankruptcy against it. They were the Federal Manufacturing Company,

J. L. Kunz Machinery Company and F. S. Buttles, and their attorneys are now seeking to secure the appointment of a trustee who will administer the assets to the best advantage. The assets are roughly estimated at \$3,000, with liabilities, secured and unsecured, at \$9,000.

The factory of the concern has been closed for some time. It originally made gasoline motors and parts, and later undertook the manufacture of a complete car. A removal from Oshkosh to Milwaukee was made last winter, but the concern was never active afterward.

### Another Company for Detroit.

Still another addition is to be made to Detroit's swarming automobile manufacturing plants. The Mohawk Automobile Co. is being organized, with a capital of \$400,000. Of this amount \$100,000 will be preferred stock and \$300,000 is to be common stock.

James E. Davis, vice-president and general manager of the big wholesale drug house of Williams, Davis, Brooks & Hinchman Sons, will be president of the new company, which will utilize the patents of Oliver E. Barthel, the well known Detroit inventor.

### Commercial Co. Elects Officers.

The recently incorporated Commercial Motor Vehicle Co., of Detroit, Mich., met last Friday and elected officers and directors. The former are Dr. J. B. Book, president; D. W. Simons, vice-president; A. F. Smith, cashier of the Commercial National Bank, treasurer, and F. S. Evans, secretary. The board of directors consists of the above named officers and M. L. Williams, president of the Commercial National Bank; Hoyt Post, Leopold Freud, Charles Berg and K. K. McLaren.

### Recent Incorporations.

Jersey City, N. J.—Commercial Motor Vehicle Co., under New Jersey laws, with \$300,000 capital. Incorporators—H. O. Coughlan, W. N. Akers and Joseph M. Mitchell.

Rochester, N. Y.—The Trebert Gas Engine Co., under New York laws, with \$50,000 capital. Incorporators—Henry L. R. Trebert, J. G. Wagner, Jr., Thomas Corkhill, Joshua M. Morris, Samuel P. Kay and John R. Kay, all of Rochester, N. Y.

Chicago, Ill.—Chicago Gasolene Storage Company, under Illinois laws, with \$5,000 capital, to manufacture automobiles. Incorporators: N. H. Minter, D. H. Jackson and W. A. Walker.

### July Exports Increase.

Exports of automobiles and parts continue to show an increase. The figures for the month of July reached \$159,739, as against \$133,073 for the same month of 1902. During the seven months of the fiscal year \$878,179 worth were shipped abroad, as compared with \$714,230 worth for the corresponding period of last year.

## NO SHOW ALLOTMENT YET

### Application Blanks for Madison Square Garden not Ready Until Next Week.

An automobile paper which should know better published recently the statement that the allotment of spaces for the national show in Madison Square Garden was to be made at once, or, rather, last Saturday. As a consequence Manager Miles of the National Association had three or four inquiries by mail or telephone, all those who read the paper desiring to know if this item in it were true. The inference of its truth was strong because, as a rule, the publication prints nothing until it has been convinced of its verity by the publication of it in all the other periodicals and dailies. In consequence of the paper in question attempting to depart from its habit and give information, Manager Miles has felt called upon to send out the following letter:

"Dear Sirs—An erroneous impression has gone forth relative to the allotment of space for the next New York show. Will you again state for the benefit of the members of this association that application blanks will not be issued until some time between the 7th and 10th of September, and that the first allotment of space will be made two weeks later. The blanks for the Chicago show will not be issued until about September 25; allotment will be made about the end of October, the exact date not yet having been fixed.

### Want Trustee for Conrad.

Efforts are being made to secure the appointment of T. Augustus Budd, a Buffalo business man, as trustee for the Conrad Motor Carriage Company. Three of the largest Buffalo creditors are behind the movement, viz., the Acme Steel and Malleable Iron Works, Walbridge & Co. and W. A. Case & Son Manufacturing Company, with claims of \$5,200, \$727.50 and \$603.93, respectively. They say that the experience of Mr. Budd in the machinery and manufacturing business qualifies him exceptionally for the office and will result in securing from the assets the largest possible amount of money.

### Shelby Adjudged a Bankrupt.

As was expected, the Shelby Motor Car Company, of Shelby, Ohio, has been adjudged a bankrupt, the formal action taking place on August 20. Referee Charles H. Keating has issued notice that the first meeting of the creditors of the company will be held at his office, Mansfield, Ohio, on September 14, at 10 a. m. At that time creditors may attend, prove their claims, appoint a trustee, examine the bankrupt and transact such other business as may properly come before the meeting.

The attachments issued against the Videx Automobile & Carriage Co., Marlboro, Mass., as noted in last week's Motor World, have been released.

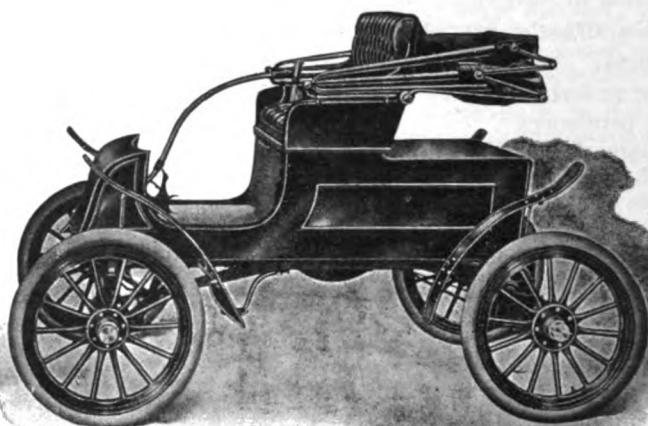
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NEW YORK, SEPTEMBER 3, 1903.

### Recognition of Motor Vehicles.

Notwithstanding our boasted progress, our proud pre-eminence in all modern movements, we have lagged lamentably and perceptibly in the matter of arranging for the quick transport of men and munitions in time of war. When the bicycle sprang into popularity a decade or more ago, and so emphatically demonstrated its superiority over the horse, the War Department either ignored it altogether or turned the cold shoulder to those who urged that it be given a chance to prove what it could do. Similar treatment has been accorded to the automobile—an even more manifestly useful, almost indispensable, vehicle. To the master minds at Washington who have the matter in charge the automobile even to-day is non-existent. Horses, with here and there a few mules, are still good enough to carry officers and men, to haul life giving and life saving supplies. That they are slow, little enduring, inefficient and wasteful matters not. They

were good enough for Cæsar, for Napoleon, for Grant, for Shafter; why should any one ask more?

It has been left for the retiring general of the army to voice the protest against this lame and impotent policy. Not for the first time, however. For years—both before and after he became lieutenant general—he lost no opportunity of saying a good word for the bicycle and the automobile. What little was done to utilize the former in our military establishment had General Miles for its suggester or encourager. Now, as his last official act, he takes occasion to recommend that these twin products of the last generation be made use of. He favors the minimizing of the cavalry branch of the service and the organization of a strong corps of war motorcycles and armed automobiles. General Miles favors mounted riflemen, but he says the horse is far less important than formerly, and that the automobile will take its place in the next war. These machines have become a valuable means of communication and transportation, and their availability is being recognized by European governments, particularly the French.

General Miles advises that a corps of five regiments be organized for thorough training and constant employment in the use of motorcycles and automobiles, the corps to be known as a flying corps or a corps of observation. Its duties would be to open the way for the advance of an army, to obtain information, to reconnoitre the country and to repair or build roads and bridges.

Timely and pertinent as these recommendations undoubtedly are, they are no more so than the assertion that European nations—including the "effete" monarchies—have been awake to the opportunities of motor vehicles. Should it ever be our fate to meet an up to date European nation on the field of Mars we should have no such "picnic" as we enjoyed when pitted against proud but decayed Spain. Our marvellous luck then would be needed more than ever, and the want of a regularly organized and drilled motor corps would be keenly felt.

Of the foreign countries, France and Germany have, as we may have expected, been foremost in testing and preparing to use motor vehicles. The motor corps are important and integral parts of the huge and formidable war machines trained and maintained at enormous cost by the governments of these countries. In the periodical manoeuvres these vehicles play a prominent and ever increasingly important part. Their use is extending all the time, and now from the

German Emperor down officers of note make almost daily use of motor cars, finding them more and more to their liking.

Even Great Britain, slow as she usually is to utilize anything that was not used in Wellington's time, has made a beginning. The British army has a motorcycle corps and an automobile corps, and should the foot of an invader ever be placed on her soil great reliance will be placed on them, when used for scouting, reconnoitring, transporting officers, troops, etc. Unquestionably they will prove of value, the automobiles especially, as they will be in the hands of volunteers thoroughly familiar with every nook and corner of the section in which they operate.

The fact that every "live" country acknowledges the transcendent merits of the motor vehicle and makes use of it should be example enough for us. When to this is added the knowledge that proofs accumulate of its manifold superiority to the horse drawn vehicle wherever used, an end should be put to the do nothing policy that has been pursued far too long.

### Racing and Classifying.

With the running off of the elaborate programme of the Cleveland Automobile Club on Friday and Saturday of this week the fall racing season will be formally inaugurated. Close upon its heels will follow the meets projected by various organizations at Detroit, Mich.; Nashua, N. H.; Syracuse, N. Y.; Providence, R. I.; Yonkers, N. Y., and Pittsburg, Pa., all except the last two scheduled to be run within a month after the Cleveland meet.

These comprise the principal events which will close the season's racing. A number of others are talked of, and a few of them will undoubtedly get beyond the talking stage and be carried out. But there are few, if any, meets of prominence among them, so that the list given embraces the cream of the speed events. The meets themselves equal in number and importance all those held previously; and keen contests and consistent record breaking may reasonably be looked for if the conditions are at all favorable.

At these meets, too, the new racing rules will receive their final test. The races already held have not shed sufficient light on the subject to enable a final judgment to be pronounced. The changes made have undoubtedly proved efficacious as far as our present knowledge goes, but whether they

can be regarded as definitely approved is something that it is too early to prophesy.

Especially is this true of the new classification rule. It was drafted with the express purpose of bettering a very imperfect condition of affairs, of replacing chaos with order. But it is doubtful if even its framers were devoid of a feeling that it was a half measure, one which, at the most, would work a slight improvement rather than one which went to the heart of the matter and offered a perfect solution. To do the latter was not easy. No man could offer a solution, so snarled and tangled was the knot, so new and perplexing the condition of the racing game.

Undoubtedly the knot will be untied sooner or later; or else some Alexander will arise to cut it with one stroke of his sword; for upon the proper classification or handicapping—the words are virtually synonymous—of contesting cars depends the very life of the racing game. As we have so often pointed out, the racegoing public wants to see contests. Even the hair raising exploits of an Oldfield will pall upon spectators after awhile. But a close and hard fought race, with the result in doubt until the last second, is what they want, what they pay their money for, and what they will go miles to see.

Heretofore, in classifying or handicapping cars, the matter of weight alone has been taken into consideration. This has been due to the difficulty of hitting upon any other satisfactory method of equalizing matters. Unquestionably piston displacement and price are also prime factors, and should enter into the equalizing process. But how? There comes the rub. Price imposts could be arrived at if all racing cars were stock vehicles; but, of course, they are not. And as far as piston displacement is concerned, the establishment of a standard seems even more difficult. But it must eventually work itself out, and when it does the racing atmosphere will be much clearer.

### Light is Breaking Through.

Although in some quarters it was not taken seriously, the new law proposed some time ago by the Motor World to regulate the use of horses on the highways, license their owners and make them prove their competency and the docility of the animal before being permitted to go upon the public roads, is proving to have acted as some leaven in the lump of prejudice against automobiles and their users. More than one thinking

person has come to see that the proposition was not merely a joke, and there is a growing appreciation of the fact that it is the horse and not the automobile that is the offender in highway disturbances.

That light is breaking into the dark corners of the editorial sanctums of the daily press is being evidenced now and then by some very sane comment such as this from the Springfield (Mass.) "Union," the editor of which has manifestly read and reflected upon the law proposed by the Motor World:

"It seems quite as reasonable for public safety that owners of nervous and half-broken horses, which are liable to be frightened into a stampede at the sight of a bit of paper, a baby carriage or an automobile, and often held by a harness tied up with strings, should be obliged to get and pay for a certificate of ownership, and also \$2 for the privilege of using such an animal in the highways of the State, as to demand that the owner of an automobile shall be taxed for the use of his carriage.

"The law says that 'before a license to operate an automobile is granted, the applicant shall pass such examination as to his qualifications as may be required by the highway commission.' Also that the automobile shall be supplied with 'an adequate brake' and numerous other things, and shall display lights after dark. But any man or woman, however poorly qualified, may drive a wild and half-broken horse, with a rotten harness, anywhere, and may drive at night without carrying a light, and no 'license' for doing this is required.

"The automobile law in this State, and the infamous Bailey law in New York, are indications of the foolish prejudice in the popular mind against novel innovations, and Massachusetts will gladly repeal that law some day. It may be remembered that the inventor of the umbrella, when he carried one in the street, was almost mobbed by the people because of this whimsical prejudice against the introduction of a novelty, no matter how useful it may be. And it seems most unjust discrimination against the owners of automobiles to put such restrictions upon them, because they are pioneers in the introduction of this new and improved method of conveyance on the public highways."

Also we find the "Eagle," of Brooklyn, N. Y., commenting broadly as follows:

"The hostility to the automobile is disappearing, just as that against the bicycle has disappeared. It is the same hostility that we find against anything new, whether it is

a self-driven wagon, or a cotton gin, or a spinning Jenny, or a new plank in the Presbyterian platform. For, after all, the automobile seldom misbehaves, and it shows no meaner a disposition than do those who lurk for it and offer to sell information against it to the constable for a dollar. The average driver of the 'bubble' is not a whit more reckless than the average driver of a horse. Indeed, we do not know where it is safe to run an automobile at the pace struck by horsemen in our parkways.

"There never was a new mode of locomotion that did not in its early stages arouse dire hostility. The opposition to Stevenson's locomotive is historic.

"Thus it is to be in the present case. There have been and are abuses with automobiles—the same sort of back-brains which the bicycle scorcher showed in infringing on people's rights. But commonsense will prevail in the end. We are used to horses and their driving. When automobiles become as familiar we shall be able to consider them without prejudice. Meantime the word for all is moderation."

Even out in Missouri the light is breaking, as witness this from the Kansas City "World":

"There is really more danger to the public from horses and their driving than there is from automobiles. But we are used to horses. We do not think of the danger. We have adjusted ourselves to that condition. When automobiles become as familiar we shall be able to consider them, too, without prejudice.

"The automobile is a vehicle of progress. We could not stop it if we would. By getting in its way, by opposing it, by railing against it, we are apt to injure ourselves alone.

"There is little profit and less sympathy for the cavalier who stands in the way of progress."

Occasionally a glimmer of the real common sense that is supposed to be the foundation of law and justice is reflected from the bench. An English justice who found a motorist guilty of exceeding the speed limit imposed but a light fine because the evidence disclosed that "there was no traffic on the road at the time."

Records made upon tracks indicate that there are in this country one or two machines capable of giving the one mile straightaway record of 46 seconds a hard rub. Why cannot a try be made to place this record to the credit of America?



## DETAILS OF THE CONTEST

### Arrangements are Elaborate—A Paper "Scent" on the Course—The Night Stops.

Arrangements for the reliability contest from New York to Pittsburg, to be held October 7-14, under the auspices of the National Association of Automobile Manufacturers, are going forward splendidly, and the indications are that the run will have more nearly perfect details than any similar contest.

Secretary Harry Unwin arrived at Cleveland Tuesday on his second survey trip of the course. The detailed information concerning the route is being gathered in a more complete manner than ever before. Some idea of how thoroughly the work of Secretary Unwin is being done can be had from the fact that while this is his second trip between the start and finish, he spent two weeks on the road between New York and Cleveland. In a letter from Mr. Unwin, written at Buffalo, received at the headquarters of the N. A. A. M., on Monday, he said that he had been traveling through four days of rain and that it was not possible at any time to travel faster than eight miles an hour owing to the condition of the roads. Mr. Unwin wrote that much of the time he was operating the Searchmont observation car and had great difficulty in keeping it out of the ditch.

The tabulated sheets sent in by Mr. Unwin are extremely interesting. They show that observations are jotted down on an average of every two miles. The observations are of the most practicable and serviceable sort, and it is evident that there will be no excuse for any contestant who loses his way. Starting from the ferry on the New Jersey side and proceeding along the Ramapo valley, the chart gives a record of the sort of road, dirt, macadam, or other material; its condition, width and the grade. The grades are indicated in squares for every mile or two by a line either horizontal or deflecting downward or upward at varying angles, and having the percentage of rise or fall marked on it. Every turn or twist of the road is most explicitly described, with special attention paid to those most helpful details—landmarks. The scenery about the turning points is given in such a way that no one could be in doubt which way to go. Such notes as "red schoolhouse to the left," "big double white house with barns on the corner" and similar ones recur frequently. A drawing of all the sign boards is given, and the towns passed through are noted with a precision in fractions of miles that leaves no loophole for questions. Also all the hotel accommodations to be had are given in detail, and the places where gasoline and other supplies are to be had are all recorded with name and location and prices.

The survey is being made with two odo-

meters on the car, the same as the first one was, and when the second trip is ended and the variations of the four odometer records are averaged, it is safe to say that the distances given between points will be as accurate as it is possible to get them without the use of tape and transit. To cap all, a paper trail is to be laid over the course by a third trip to be made by Secretary Unwin a few days before the run. After he has gone along and laid a paper "scent" thick enough to last for a couple of weeks General Manager Miles will go over the course with nothing to guide him but the "scent," and note the places where it is weak or misleading, and rectify the mistakes if there are any.

The overnight stops have been practically settled upon as follows, there being a couple of changes from the original plan:

Wednesday, October 7, Pine Hill, N. Y., just out of Kingston; Thursday, October 8, Bath, N. Y.; Saturday and Sunday, October 10-11, Buffalo; Monday, October 12, Erie, Pa.; Tuesday, October 13, Cleveland, Ohio; Wednesday, October 14, Pittsburg, Pa.

"Everything is going to be done with first-class thoroughness," said Manager Miles. "The press representatives will be taken care of as they never were before. The observers will not be allowed to give out any information. They will report to a superintendent of observers, and he will report to the committee and be told what may be given out. To insure all being treated alike and to save work on the part of the newspaper men and to spare the committee men from being bothered individually, there will be two press agents, whose duties it will be to dig out the information wanted by the press and furnish it to the reporters."

#### RULES OF THE RUN CHANGED.

On Wednesday a meeting of the technical committee of the N. A. A. M. was held, and the rule requiring each vehicle to carry 30 per cent of its tare was changed so as to require the load to be only 25 per cent. This will not include any parts or repair material. The 25 per cent load must be made up by passengers and ballast, and the parts carried will be excess weight.

Another modification made in the rules was one permitting the contestants to renew their supplies of gasoline at the noon stop and to lubricate their engines then, but nothing else.

The load carrying rule was one that caused the committee considerable discussion. When the rules were first announced there was criticism of the weight carrying provision. It was pointed out that the rule requiring every car to carry at least 30 per cent of its weight would militate against such makes as the Haynes-Apperson and the Knox. These cars, being made to carry two passengers only, would find it necessary, after taking on two persons of average weight, say, 150 pounds each, to add something in the line of dead load in order to make up the necessary 30 per cent of their tare. The Haynes-Apperson Co., for instance, build a

car that weighs 1,400 pounds to carry two passengers. Under the 30 per cent rule they would have had to carry 420 pounds. As it is unlikely that they could get a driver and an observer to make that weight, they would have had to carry one hundred or more pounds of junk over the road. This would hardly be a fair testing proposition, since such a proceeding is not recommended when the firm sells a machine. The Knox people make a two-passenger machine that weighs 1,800 pounds. They would have had to get two persons weighing 270 pounds each, or else make up by ballast whatever their combined weights lacked of this total.

In explanation of the 30 per cent arrangement having been made, the problem as it presented itself to the committee must be considered. They felt obliged to impose some uniform percentage of load to tare, and sought to make it equitable all around so far as possible. It was found that 30 per cent would be just about right for four-passenger cars of the average of 2,000 pounds, since four persons, of the average of 150 pounds each, would weight just 600 pounds, or 30 per cent of 2,000 pounds. But it would, as has been shown, crowd the conditions on the heavy runabouts for two persons by making them carry ballast in addition to the two persons (driver and observer) which every car must carry under the rules. The 30 per cent, it was found, would also impose similarly upon the heavy four-passenger cars, those of 2,400 pounds, for instance, but not so much; it would not be so unreasonable to suppose four passengers averaging 180 pounds each.

On the other hand, it was seen that the 30 per cent basis would impose unfair conditions on the light cars of all styles. A runabout weighing 750 pounds, for instance, would have to carry two passengers, and, supposing them to weigh 150 pounds each, it will be seen that while the heavy runabouts, ballast and all, would be carrying only 30 per cent of their tare, the lighter cars would be carrying seventy-five pounds more than 30 per cent, and would be handicapped just that much. The light, four-passenger cars would suffer similarly, and it was a question what to do. The rule was first fixed at 30 per cent, therefore, because to make it lower in order to spare the heavyweights from carrying ballast would be to increase the handicap of the lighter ones. For instance, with a rule requiring 20 per cent of the tare to be carried, the 1,400 pound cars would be all right with two 140 pound passengers, but the 750 pound car would have to carry two persons anyhow, and yet, if the two weighed 300 pounds, they would be carrying just 150 pounds handicap in excess of the 30 per cent required.

In compromising to the heavyweight makers, it seems a question whether the best solution has been reached, for the light runabouts will carry a heavier handicap under the 25 per cent rule than they would under the 30. The reduction was due probably to the fact that the makers of the light cars have not complained.

## MILES' RECOMMENDATIONS

### Retiring General Wants Motorcycle and Automobile Corps Established for Army.

Upon his retirement for age Lieutenant General Nelson A. Miles addressed a communication to the War Department. It is in the form of a letter to Secretary of War Root. In it are important and sensational recommendations for the improvement of the army service.

General Miles regards the cavalry as obsolete, saying the automobile will take the place of the horse in the next war. For that reason he advises reducing the cavalry branch to the minimum and the building of military roads of strategic importance throughout the country in time of peace.

President Roosevelt and Secretary Root have had possession of General Miles's letter since August 8. They have kept it secret, however, the reason being, it is said, that it could not be revealed to the public until the recommendations were acted on.

General Miles in his letter cites the Spanish-American War as an example showing that the horse is no longer of much practical value in military service. European armies, he says, have a much smaller proportion of cavalymen to infantrymen than has the United States Army. The Europeans depend on more modern appliances than the horse, using the bicycle, the motorcycle and the automobile. Where they find horses indispensable they employ mounted riflemen, thus quickly converting the infantry into cavalry. Americans, he says, are practically raised in the saddle, and a force of mounted riflemen could be equipped from the infantry much quicker than in European armies.

He therefore advises that a corps of five regiments be organized for thorough training and constant employment in the use of motor cycles and automobiles, the corps to be known as a flying corps or a corps of observation. Its duties would be to open the way for the advance of any army, to obtain information, to reconnoitre the country and to repair or build roads and bridges.

One of General Miles's most important recommendations is that the army be used in time of peace to build military roads of strategic importance. He would establish a road building corps of 5,000 as a nucleus and equip it with the most modern road making machinery and set it to work building roads in various parts of the country. These roads in time of war would enable the armed automobiles he advocates to be moved swiftly from place to place.

### "Automobile Days" for Denver.

Denver, Col., hopes to have an annual "Automobile Day" as a result of the first one, which is scheduled for September 10. Nearly all the automobile dealers in the city have signed an agreement to participate in

the occasion. Of the two who did not sign one was out of the city. The signers are the Colorado Automobile Co., A. T. Wilson, the Automobile Repair Co., the Colorado Mobile Co., the Colorado Motor Carriage Co., E. R. Cumbe, the Studebaker Bros. Mfg. Co., George E. Hannan, Gougar & Todd, Frank O. Browne and the Eaton-McClintock Gasoline Co.

The project originated with the business men of the city, who are pushing it forward with much energy. They have invited the Denver Automobile Club to take charge of the classification of events. The prizes for the different events will be gold, silver and bronze medals. No money prizes will be given.

In the afternoon there will be an entertainment at the City Park, in which the automobiles will participate. An endurance run on September 9, with the finish at the park on the following afternoon, has been suggested. One of the features of the day will be a hill climbing contest. In the evening it is proposed to have an illuminated parade. In all the parades there will be decorative features.

### To Girdle the Earth in Automobile.

Verno Churchill, an artist, who has made a reputation as a globe trotter, started from Atlantic City on Saturday afternoon to make his second trip around the world. For this journey he bought a large touring automobile. The car was taken to the end of Young's Pier for the start, which was made an occasion for some ceremony. Speech-making was a feature. Among the speakers was the Mayor of the city, whose address was in the form of a farewell and godspeed. Mr. Churchill made a fitting response.

Starting amid cheers the departing automobilist drove swiftly along the pier through a lane composed of thousands of people. His automobile is one of the finest ever seen in Atlantic City. Churchill will travel 25,000 miles, and expects to be gone sixteen months or longer. He expects to go to San Francisco, whence he will cross the Pacific Ocean to Japan, travelling through that country, China, India and Europe.

Churchill's first tour of the globe began at Washington, and he started with a nickel given to him by Admiral Dewey. When he returned he had upward of \$2,000, earned on the road by painting.

### Spa Fete Dates Changed.

The Spa Automobile Club has changed the dates previously fixed for its fetes, deciding on September 4, 5, 6 and 7, thus making the affair quite a "Spa week." The programme is as follows: September 4, weighing of machines; September 5, hill climbing contest at Malchamp, followed by the Coupe de Spa, one-mile, standing start; September 6, touring circuit, sixty kilometres; September 7, "concours d'adresse" at the Velodrome; distribution of prizes, banquet. Would-be competitors should send their entries to the Spa Automobile Club, Hotel d'Orange, Spa, and to the Automobile Club de Belgique, 5 Place Royale, Brussels.

## MUST HAVE LICENSES

### Canadian Authorities Issue Order Requiring Tourists to Register Their Cars.

On the first day of the current month a new order in council adopted by the Canadian Government and relating to automobiles from the United States, went into effect.

This order declares that all persons entering the Dominion in automobiles from the United States will be required to purchase a license for the sum of \$2. An additional \$1 will have to be paid into the Canadian Government's coffers for an aluminum sign, three inches in height, to be placed by the owner on some conspicuous part of the machine, disclosing to the public the number of his license. The precaution is to secure recourse against violations of the speed regulations, or for damages caused by carelessness.

The Minister of Customs has agreed to permit the customs officers at ports of entry to be appointed license officers for motor vehicles. The officer issuing the license will be allowed 50 cents commission.

The license is good for six months only from the date of issue. On leaving the Dominion the driver must surrender the "marker," when the \$1 will be refunded. Americans found travelling in the province without a license or without the marker displayed will be liable to a heavy fine.

The following ports are among those mentioned in the new regulations: Cornwall, Kingston, Toronto, Niagara, Hamilton, Windsor, Walkerville, Sarnia, Port Arthur and Sault Ste. Marie.

### Suggests Invalids' Automobile Day.

The incident of giving the children from the Home for the Friendless a ride in the automobiles that went to meet the Packard tourists from California, as narrated in the Motor World last week, furnished W. J. Morgan, who was one of the party, with an idea worthy of consideration. He suggested that New York automobilists set aside one day of the year, to be known as "Invalids' Automobile Day," when the owners of automobiles, agents and manufacturers would be invited to turn out in a body, placing their machines at the disposal of the hospitals and similar places, so that the sick and the weak might be taken out into the country for a day's outing in the automobiles.

The proposition was received kindly at the time, and now it seems to need only the efforts of persistent propagation to be adopted and acted upon. Publicity for makers and dealers could be earned in no more worthy way.

### Follows Example of Boston.

Following the example of the Boston Y. M. C. A., the Minneapolis association will add this autumn a course in gasoline engineering as applied to automobiles and launches. The course will include the study of motors of various types, transmission gears, carburetters, ignition apparatus and the peculiarities of different fuels.

## MEET FOR MILWAUKEE

### Full Program Arranged for Races at State Fair —Cup Contestants Expected.

Three events, two of them amateur and one professional, have been decided upon for the automobile feature of the Wisconsin State Fair to be held at Milwaukee this month. The races have been arranged by Secretary John M. True, of the State Board of Agriculture, and members of the Milwaukee Automobile Club. Mr. True was assisted in arranging the events by Dr. Ralph Emergreen, James T. Drought and Fred Patee, of the Club.

It is expected that at least three of the Americans who participated in the Gordon Bennett Cup races in Ireland will participate. They are Louis Mooers with his Peerless racer, Alexander Winton and Percy Owen, each with Winton racers. It is also hoped that Barney Oldfield, of Cleveland, as well as Tom Cooper, of Detroit, and Carl Fischer, of Indianapolis, may be prevailed upon to participate in the professional events.

The programme, as outlined, is as follows, the races to be held on Wednesday, September 9:

Race No. 1, amateur; two-miles; open to all machines weighing 1,400 pounds or less; five medals, value \$100. Race No. 2, amateur; three miles; open to all machines weighing from 1,400 to 2,000 pounds; five medals, value \$150. Race No. 3, professional free-for-all; ten miles; purse \$750; open to all machines irrespective of size or weight; first prize, \$400; second prize, \$200; third prize, \$150.

All entries will be closed September 5. A \$5 entry fee will be charged for races Nos. 1 and 2, and \$10 entry will be charged for race No. 3. All entrance moneys will be refunded to those who actually start in the races. The races will be run under the racing rules of the Automobile Club of America, sanction for this having already been applied for.

On Thursday, September 10, one hour will be devoted to exhibitions on the racetrack by various machines. Many local automobiles will enter the amateur races.

### Providence, Revises its Program.

Out of deference to numerous inquiries regarding certain restrictions placed upon the classes of events of the Rhode Island Automobile Club race meet, to be held at Narragansett Park on September 19, it has been decided to revise the list of open events, making two of the races open to all motive powers and removing many other restrictions. New entry blanks have therefore been sent out.

The revised list of events and prizes are as follows:

First race (gasolene, 1,200 pounds and

under)—Five miles; first prize, full value, \$100; second prize, full value \$50.

Second race (all motive power, 1,800 pounds and under)—Five miles; first prize, full value, \$100; second prize, full value, \$50.

Third race (all motive power, all weights)—Ten miles; first prize, full value, \$200; second prize, full value, \$100.

Fourth race (steam carriages, all weights)—Three miles; first prize, full value, \$100; second prize, full value, \$50.

Fifth race (open class; electrics)—Two miles; first prize, full value, \$100; second prize, full value, \$50.

Sixth race (motor bicycles, single machines; open class)—Five miles; first prize, full value, \$50; second prize, full value, \$25; third prize, full value, \$10.

The events will commence at 2 p. m., and the machines will take flying starts.

### Detroit's Bright Anticipations.

Ned Broadwell, secretary of the Detroit Automobile Racing Association, anticipates a series of brilliant events at the local meet to be held at Grosse Pointe next Monday and Tuesday. Among the entries of which he is assured are L. P. Mooers and the Peerless car which Mooers used in Ireland; Hedges in a fast White car; Windsor T. White with a new car turned out by his company; Barney Oldfield and a big Winton; Henri Page and Jules Sincholle, who will content in a fifteen mile match race, using the same machines which they used in the Paris-Madrid race; Tom Cooper, who will contend with Barney Oldfield in an Australian pursuit race of five miles on each of the two days, and some others.

One of the events arranged is a five mile handicap for local owners. In this race each car must have road equipments and carry four persons.

### Races at Nashua Fair.

The last day of the fair to be held by the Nashua (N. H.) Fair Association on September 7 to 10, inclusive, will be marked by automobile racing. Four events are scheduled, as follows:

First event—All weights and powers, no restrictions as to operators; five miles. First prize, \$75; second, \$50.

Second event—All weights, supplies included, to be under 1,800 pounds; steam, gasolene or electric power; five miles. Same prizes.

Third event—All weights, supplies included, to be under 1,200 pounds; steam, gasolene or electric power; same distance and prizes.

Fourth event—All weights, supplies included, to be under 800 pounds; steam, gasolene or electric power; same distance and prizes.

The racetrack at Nashua is a half-mile course.

George C. Cannon has remodelled his steam racing car, and expects to use it for the first time at the meet of the Rhode Island Automobile Club on September 19. It now seats two men side by side, and is said to be faster than ever.

## SYRACUSANS ARE SANGUINE

### Expect Race Meet at State Fair to be Big Success—Attractive Program.

There is every indication that the automobile race meet to be held at Syracuse, N. Y., on Saturday, September 12, in connection with the State Fair, will be a complete success. An attractive programme has been arranged, comprising eight regular races and one special three cornered match race between F. A. La Roche, Jules Sincholle and Henri Paige, the first two driving 40 horsepower Darracqs and the last a 40 horsepower Decauville. The entries close September 9, and racing begins at 2 o'clock on the following Saturday.

The New-York State fair is an institution of note, and it attracts an enormous number of people. This is the first automobile race meet that has taken place on the track—which is a mile circuit, 100 feet wide—and it is expected to prove popular and become an annual affair. Many State dignitaries, including the Lieutenant Governor, are expected to attend.

The list of events follows:

No. 1, two miles for motor bicycles; regular stock machines. No. 2, five miles for cars of all weights, supplies included, under 1,200 pounds; all motive powers; No. 3, five miles for Winton touring cars; stock models with tonneau attached; No. 4, ten miles for cars of all weights, supplies included, under 1,800 pounds; all motive powers; No. 5, five-mile handicap, for club members only, each car to have regular road equipment; No. 6, five miles for Franklin cars; regular stock models; No. 7, fifteen miles; open to all; No. 8, one-mile; record trials.

### Yonkers' Meet Oct. 3.

October 3 has finally been decided upon as the date for the third meet at the Empire City track, Yonkers, N. Y. This is just three days prior to the start of the endurance run which leaves New York for Cleveland and Pittsburg on October 7.

There will be six regular events, including a motor bicycle race, in addition to special match races to be arranged. Silver trophies will be given to the first and second in each event. An effort is being made to bring a foreigner to this country to ride against Oldfield. Offers have been made to Janetzy, Gabriel and Jarrott. In case a foreigner does not visit America Oldfield may race Tom Cooper, the latter using the machine with which Oldfield established the present world's record. The machine is the property of Cooper, who is anxious to race the American champion.

### Florida Racing Dates.

The 1904 Daytona-Ormond race meet will be held between January 25 and February 6. Sanction covering these dates has been granted by the American Automobile Association to the Florida East Coast Automobile Association.

## GOOD SPORT AT COLUMBUS

### Oldfield the Star in a Two Days' Brilliant Meet Marked by Sensations.

The August race meet of the Columbus (Ohio) Automobile Club, held at the Driving Park last Friday and Saturday, was a success in every respect, the only disappointment being the non-appearance of Tom Cooper, who is not yet well enough to undergo the severe strain of racing. He was well represented, however, by his new partner, Cunningham, who shared with Barney Oldfield and Carl Fisher the hearty favor of the five thousand or more people who attended on both days.

On Friday, as a climax to an afternoon of strenuous pleasure, there was a sensational five mile race between Oldfield, driving the Winton "Bullet," Fisher on his 100 horsepower machine, and Cunningham on one of the Ford-Cooper racing cars. Oldfield got the worst of the start, but by speed and generalship got the lead and finished more than an eighth of a mile ahead of Fisher, who led Cunningham by a sixteenth.

Oldfield was evidently the favorite with the spectators, but his stock was reduced by Cunningham very perceptibly earlier in the afternoon in a five mile contest between the two. Cunningham was too fast by a mile for Barney, and set the pace for him five times around the track. Cunningham was making his fifth lap of the track when Barney was making his fourth. The former was going so fast and created such a fuss with the dust that he turned too short on the upper curve and there was an explosion. It was a moment of intense excitement, for when Cunningham was last seen he was breaking for the fence and trying to pass Oldfield, who was in his way.

Out from the cloud of dust came Oldfield first, and lagging behind came Cunningham, who pulled up in front of the grand stand and was immediately surrounded by a crowd who first asked if he had struck Oldfield's machine or what had happened. He explained it all by saying his tire had cracked, and that was all there was to it. It has been claimed right along that if a tire should break when machines are going at such a terrific speed it would result fatally to the driver. Cunningham's experience disproved the general impression.

In the seventh event, a free-for-all, Oldfield, Cunningham and Fisher took two spins about the track, and after passing the big racers they started down the stretch, with Cunningham in the lead, Fisher a close second and Oldfield trailing behind for an opportunity to euchre them out of position when they struck the first turn. He carried out the plan in most excellent style and when the dust cleared away on the back stretch at the quarter pole Barney was leading Cunningham and Fisher a merry chase.

The bigger racers all tried to turn in the

same wheel tracks and then there was a great showering of dust. While it covered Oldfield, who had fallen to the rear suddenly, there was much excitement in the stands. Evidently something had happened and this became more evident when Oldfield dropped farther and farther back and was left by the other two, who kept on going like rockets. When Oldfield's machine got closer the left hind wheel was wobbling and he wore a look of disgust. The axle on the Bullet had broken, but fortunately he was far enough from the other two automobiles to keep from being hit or hitting them.

Fisher and Cunningham continued the race with the utmost spirit, Fisher winning. Summaries of Friday's events follow:

Two-mile club run—Won by Oscar Lear's 8 horsepower Knox-Waterless, driven by J. E. Cowan; Frank Avery's 20 horsepower Winton, second; E. Seed's 6½ horsepower Sandusky, third; J. C. Sherwood's 4 horsepower Orient-Buckboard, fourth. Time, 5:45 3-5.

Three-mile race for gasoline machines weighing under 1,150 pounds; machines equipped just as used on the road—Won by Dr. E. W. Schiller's 6½ horsepower Cadillac, driven by Joe Montgomery; Oscar Lear's Cadillac, driven by Joe McDonald, second. Time, 6:53 3-5.

Carl Fisher's 100 horsepower Krisa Fisher against time for records of one, two and three miles—Time, one mile, 1:07; two miles, 2:14; three miles, 3:20 1-5.

Five-mile race for touring cars equipped as used on the road—Won by R. S. Rhoades's 10 horsepower White steamer; C. R. Mayers's 14 horsepower Toledo, driven by N. H. Soules, second; F. E. Avery's 20 horsepower Winton, third; Dr. C. M. Taylor's 10 horsepower White steamer, fourth. Time, 9:07 3-5.

Five-mile race, best two in three heats—Barney Oldfield (Winton Bullet II), 2-1; Cunningham (Ford-Cooper), 1-2. Time, first heat, 5:16 2-5. Time by miles, 1:03 2-5, 3:06 2-5, 4:10 2-5, 5:16 2-5; second heat, 5:05 2-5. Time by miles, 1:00, 2:01, 3:02 1-5, 4:03 4-5, 5:05 2-5.

Three-mile race for motorcycles—Won by E. A. Neff (1¼ horsepower Thomas); Frank Lowell (3 horsepower Buckeye), second; Ernest Wolumber (3 horsepower Marsh), third; K. B. Seeds (2½ horsepower Hercules), fourth; H. A. Nichols (2 horsepower Mitchell), fifth. Time, 4:39 1-5.

Five-mile race for steam touring cars—Won by Frank Davis's White, driven by E. M. Leid; Dr. C. M. Taylor's White, second; R. S. Rhoades's White, third. Time, 9:17 2-5.

Five-mile, free-for-all—Won by Barney Oldfield (Winton Bullet II); Carl Fisher (Krisa-Fisher), second; Cunningham (Ford-Cooper), third. Time, 5:20. Time by miles, 1:05, 2:12; 3:17, 4:19 3-5, 5:20.

Special race; three miles; Oldfield against Cunningham—Won by Oldfield. Time, 3:10 2-5.

The summaries of Saturday's events:

Obstacle race—Won on points by G. W. Jeffrey's 2½ horsepower National; R. O. Williams's 3½ horsepower Oldsmobile, sec-

ond; W. D. Jeffrey's 2½ horsepower National, third.

Oldfield-Cunningham race, final heat—Won by Oldfield. Time, 5:14 2-5.

Five-mile handicap for gasoline machines weighing 1,500 pounds or more—Won by Dr. E. W. Schiller's 6½ horsepower Cadillac, driven by Joe Montgomery; S. H. Hempstead's 8 horsepower Ford, driven by Avery, second; Seeds and Evans's 6½ horsepower Sandusky, driven by Seeds, third; Herman Hoster's 5½ horsepower Rambler, fourth. Time, 10:44 2-5. (Protested on ground that Ford and Cadillac machines violated the rules regulating their start.)

Barney Oldfield (Winton Bullet II), ten miles against record for machines under 1,800 pounds. Time, 10:25 4-5.

Five-mile handicap for touring cars—Won by Dunn, Taft & Co.'s 10 horsepower White, driven by Jay; R. S. Rhoades's 10 horsepower White, second; C. R. Mayers's 14 horsepower Toledo, third. Time, 7:26 2-5.

Carl Fisher (Mohawk-Fisher) failed in his attempt to break world's three-mile record. Machine broke.

Five-mile handicap for motorcycles—Won by E. A. Neff (1¼ horsepower Thomas); Frank Lowell (3 horsepower Buckeye), second; Ed. Adams (2 horsepower Mitchell), third; P. A. Nichols (2 horsepower Mitchell), fourth; W. F. Savage (2 horsepower Mitchell), fifth.

Five-mile, free-for-all—Won by Fisher (100 horsepower Fisher); Cunningham (Ford-Cooper), second; Oldfield (40 horsepower Winton), third. Time, 5:35 1-5.

Match race; two miles; Cunningham against Fisher—Won by Fisher. Time, 2:17.

### Olds Tourists Marooned at Omaha.

The Oldsmobile tourists, Whitman and Hammond, according to the latest advices received from them, were hung up, not high and dry, but disgusted and damp, on a high hill in Omaha, Neb. They spent the whole of last week there, with no prospect of getting away immediately.

Too much water is the explanation of the matter. They have been gathering experience which will enable them to describe a real Western flood. To them Omaha has been an island in the middle of the United States, surrounded by water and mud for hundreds of miles. All travel has been suspended for some time, Mr. Whitman wrote on August 30. Bridges have been swept away in all directions. On the day appointed for the departure from Omaha ten inches of rain fell in twenty-four hours. This is the largest amount of rainfall in one day ever recorded by the Weather Bureau in Omaha.

On Sunday last Mr. Whitman and his travelling companion took out the Oldsmobile to run over to Council Bluffs. Before reaching there they found that the bridge at Main street was gone and that its replacement had proceeded only as far as the laying of stringers. They obtained permission from the superintendent to cross at their own risk, and did so, amid the applause of a number of spectators. To them the feat was a trifle. The possibility of a ten-foot fall into two feet of water could not appal men who had taken a tumble down a jagged precipice in the Sierra Nevada Mountains.

## AUTOMOBILES ON PARADE

Bridgeport had a Big Turnout to Inaugurate the "Old Home Week" Festivities.

"Old Home Week" in Bridgeport, Conn., opened on Monday with unpropitious weather, but that was not permitted to interfere with the celebration. The city was

nearly three tons, including the weight of twelve musicians and the two men in charge. This great weight rested on four double tube tires of 3½ inches diameter, which gave no trouble during the entire parade, covering a route about fourteen miles long. The band wagon was lavishly decorated. J. N. Page and A. C. Schults were in charge.

Northern; C. E. Hartman, Locomobile; G. B. Houston, Locomobile; Henry Kempf, Locomobile; S. D. Locke, Packard; F. Lyman, Locomobile; T. H. MacDonald, Winton; W. S. Mills, Stanley; Edward Mora, Cadillac; William Naramore, Locomobile; Clarence Naramore, Oldsmobile; J. W. Noyes, Locomobile; Mrs. T. A. Oberly, Locomobile; J. L. Oberly, Locomobile; Elton Perry, jr., Lo-



THE LOCOMOBILE BAND WAGON HEADED THE PROCESSION.

in gala attire, and one of the big parades of Monday was that of the automobiles.

The automobilists assembled at Seaside Park, their cars representing nearly every make. When the procession started at 9:30 a. m. it was headed by a Locomobile band wagon, which constituted a big feature. It was built upon an ordinary sixteen horsepower chassis, the entire outfit weighing

Among the automobilists in the procession were the following local owners: Dr. F. J. Adams, Victor; Dr. Dow R. Beebe, Locomobile; R. N. Blakeslee, Oldsmobile; F. W. Bolande, Locomobile gasoline; A. H. Chapin, Steam Stanhope; D. C. Carson, Locomobile; S. T. Davis, Locomobile; M. V. Doud, Locomobile; W. H. Evers, Locomobile; F. I. Gaylord, Locomobile; G. W. Hills,

comobile; J. O. Robertson, Stanley; A. L. Riker, Locomobile gasoline; Louis E. Sage, Locomobile; E. V. Sloan, Winton; Frank T. Staples, Knox; W. S. Teel, jr., Locomobile; A. K. L. Watson, Locomobile; DeVer H. Warner, Locomobile gasoline; Frank Wiles, Locomobile.

A number of out-of-town motorists also attended and took part in the parade.



## HIGHWAY TO CHICAGO

**Progress There has Been in Making one Detailed by Road Association.**

The New York and Chicago Road Association, of which Colonel Albert A. Pope is president, has issued a statement of the progress which has been made to date in the carrying out of its plan for a highway between this city and Chicago. It is said that the United States is the only civilized country in the world which has no system of improved highways. With the exception of six States—New Jersey, Massachusetts, Connecticut, New York, Michigan and Pennsylvania—there is no attempt at an organized plan for securing better roads. In these States the work has been done only in the last ten

The proposed route leads from New York City up the east side of the Hudson River to Rhinebeck, thence through Ulster, Delaware, Broome, Chenango, Tioga, Chemung, Allegany, Cattaraugus and Chautauqua counties, in New York, to Erie, Pa.; thence it follows the lake shore to Toledo, Ohio, and on to Chicago through Indiana. Among the important cities and towns the route touches are Poughkeepsie, Kingston, Owego, Elmira, Corning, Hornellsville, Salamanca, Wells-ville, Jamestown and Westfield, in New York; Erie, Pa.; Ashtabula, Cleveland, Lorain, Sandusky, Clyde, Fremont, Toledo and Bryan, in Ohio; Butler, Goshen, South Bend, La Porte, Valparaiso and Hammond, in Indiana, and Chicago. Some stretches of the road are improved and work is started on other portions. About 100 miles of the road in the lower tier of counties in New York

## REWARDS FOR CHAUFFEURS

**If Offered Would Prove Incentive for Better Work in Endurance Runs.**

It has been suggested that the committee in charge of the coming endurance contest of the N. A. A. M. should, in some way or another, take cognizance of the work of the chauffeurs who will drive cars in that event. Certificates are offered to the cars making the best showing on the trip to Pittsburg and in the brake and hill climbing contest, but, as in previous years, nothing has been considered as regarding the operators.

It is true that the majority of these operators are employed by the manufacturers to demonstrate the full value and capability of the cars, and are, therefore, perhaps not en-

## SOME OLDS TRANSCONTINENTAL INCIDENTS.



Big Chief Tries an Oldsmobile.



Three Methods of Transportation.



Fording One of the Many Streams.

years, and the limited appropriation of State money permits of building only a few miles of roads in each county. As it is, the roads so far constructed have been built in patches, leaving long stretches of intermediate roads that are dusty in dry weather and seas of mud in the rainy season. On these conditions the average road in the United States is almost impassable, and in many localities the transportation facilities are entirely suspended during many months of the year.

In New Jersey \$2,500,000 has been expended in ten years, and the increased valuation of taxable property reaches the enormous figure of \$27,500,000.

Instead of devoting the millions of money that are too often wasted annually in an unskilled attempt at road building, the association is advocating the adoption of a system that will result in having through lines, or continuous roads in the United States. When every town along this route, and they are separated only by a few miles, awakens to the necessity of this improvement and builds a good road at any time of the year the highway will be a fact.

State will be completed this year. Efforts are being made to have the stretch of road in the panhandle of Pennsylvania finished as quickly as possible.

### Chicago Chauffeuses' Indignation.

Chicago women are even more earnest than the men in their objections to tagging their automobiles. Five of them are parties to the proceedings to obtain an injunction against it. They object on the double ground that it marks them as belonging to a dangerous class, and that it defaces their vehicles.

Still another objection is that they do not want to go to the City Hall and stand in line to get their licenses. One of them remarked: "I couldn't have any more publicity about it if I were applying for a saloon license."

A number of the women are so opposed to making personal application for licenses that they send their coachmen to undergo the necessary examination. When the license is obtained every member of the family feels free to run the vehicle.

Robert W. Goelet is touring Europe in a 10 horsepower Renault.

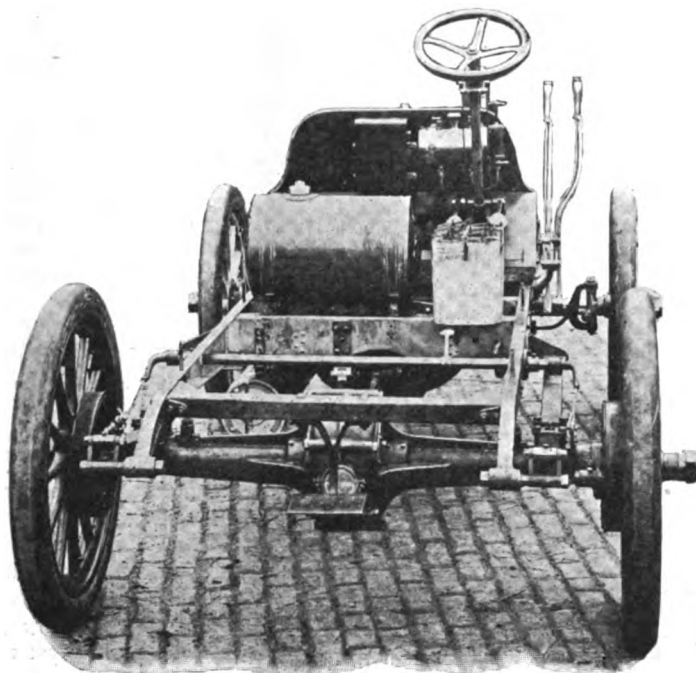
titled to any great consideration. As a result of this feeling many have gone into the contest, not with the intention of getting the very best results out of their machines as much as to have a thoroughly enjoyable time, and instances have been known where a little extra care on the part of the operator would have resulted in the cars driven making a better performance.

It has also been suggested that the association ought to give a gold medal or some other souvenir to the man operating the cars that receive first class certificates for their performances in the run. This would not cost the association a great amount of money, and would result in all the men taking greater pains to make a creditable performance. They would take more care of their cars, and see that they were brought through in the very best condition. No chances of receiving injury as a result of racing on the highways—and racing there will always be to some extent in an endurance contest—and, as a general thing, the driver would be more particular of his charge if there was a chance for him to make some personal gain.

## THE PREMIER'S CHASSIS

### Two Views Showing Careful Construction of Working Parts of Indianapolis Car.

Although still in its first season, the Premier car, manufactured by the Premier Motor Mfg. Co., Indianapolis, has already made for itself a place among well designed



REAR VIEW, SHOWING RIBBED AXLE SHELL.

and built American cars. It embodies in its construction many features which make for excellence and efficiency. Among these may be mentioned the generation of ample power and its economical application, making the car speedy and efficient on the most severe hills.

From the appended views of the Premier chassis a good idea of its working parts can be obtained. The power is supplied by a twin cylinder 5x6 vertical engine located in front under a bonnet. All parts of the engine are easily accessible and uniform lubrication is obtained. The engine is set well down in the frame, making a low centre of gravity, without sacrificing the necessary road clearance so important with cars driven on American roads.

The power is transmitted through the usual leather-faced cone clutch of large diameter and broad face, providing ample driving surface and little wear. The driving member of the clutch is self-contained, thus eliminating the end thrust of the clutch when driving.

The engine and transmission are located on a substantial subframe, and the main driving shaft is in line with the crank shaft, and is therefore so located as to prevent any twisting or contortion of the frame from affecting the alignment of the parts. Long life is assured by providing large diameter shafts and ample wearing surfaces. The crank case and the transmission case are

aluminum, fitted with long phosphor bronze bearings of large diameter, while the rear axle shell is made of two interchangeable steel castings and is ribbed, thereby doing away with the usual trusses.

The frame of the Premier is pressed steel. By this construction the minimum of weight is obtained with the maximum of strength. The frame is suspended on 40 inch semi-elliptic springs. The wheels are 34 inches

in diameter, equipped with 3½ inch clincher tires.

The body is well designed and graceful in appearance, the tonneau back being extremely high. The upholstery is of the



SIDE VIEW SHOWING POWER PLANT.

highest grade and lends elegance to the entire car. The tonneau is roomy and fully capable of carrying three people, it being fitted with a seat in front of the rear door. The rear extremity of the tonneau is within the rear extremity of the rear wheels, thereby avoiding a "teeter board" effect, lessening the strain on the tires, and at the same time adding to the comfort of the passengers.

The intake and exhaust valves are located on opposite sides of the cylinders, and are mechanically operated and interchangeable. Jump spark ignition is used. The speed of the engine is governed by a throttle governor, which controls the speed of same at any predetermined point while the car is running.

The transmission is of the sliding gear type, three speeds forward and reverse, driving direct on the high gear, the latter arrangement being conducive to quiet running. The three speeds and reverse are controlled by one lever, which automatically interlocks, making it absolutely impossible to change speeds without first disengaging the clutch. Wide face coarse pitch gears, fully capable of meeting any reasonable requirements, are used, they driving direct through cardan joints and bevel gears to the rear axle. The secondary shaft is on the same horizontal plane as the main driving shaft.

In addition to the regular foot brake on the rear of the transmission case, large diameter internally expanding rear hub emergency brakes are fitted.

### European Tire Dimensions.

In France and Germany the sectional and cross dimensions of tires are always given in millimeters instead of inches. The millimeter is, approximately, 1-25 of an inch; to express it exactly would require a long string of decimals, while the figures named are close enough for all practical purposes. A 750 millimeter tire corresponds to a 30-inch one, an 800-millimeter to a 32-inch one, etc. In giving the sectional diameters the slight inaccuracy referred to becomes more apparent. Thus, the equivalent of a 65-millimeter tire is 2½ inches, one of 85 millimeters—or "m/m" as it is usually expressed—is 3

inches, 90 m/m, 3½ inches; 100 m/m, 4 inches, etc.

### When the Brakes Need Attention.

If your brakes are not acting properly they should be seen to at once before a serious accident happens. If oil or grease on the brake bands is the trouble, clean them thoroughly with waste or old rags. If it is due to improper adjustment a few minutes' work with a wrench is all that is wanted.

## AUTOMOBILE AIDS HORSE

**Former Paces Latter to Victory Over Father Time, Breaking World's Record.**

In hearty co-operation, instead of in hostile striving, a horse and an automobile met at Dayton, Ohio, last week. Arrayed against Father Time, the famous trotter Cresceus was extended and drawn to victory through the efforts of a White touring car, which had been placed on the track to assist in pacing the horse in a trial for the world's half mile track record; and to its efforts almost solely the accomplishment of the task was due.

The event was noteworthy as marking an epoch in horse pacing methods. A number of years ago the value of pacing for trotters and pacers was recognized. Bicycle pacing was tried, and with success; running horses are employed for the same purpose on nearly all important occasions, and with the desired result of stimulating the trotter or pacer to its utmost efforts. But until last week no one had thought of using an automobile for this purpose, or, if so, it had never been put into practice.

The trial was made under rather unfavorable circumstances. It had been decided to send Cresceus against the record—his own—of 2:09¼ on a half-mile circuit, his home track being selected for the purpose. A running horse, Mike the Tramp, had been selected to pace the great trotter, and almost at the last moment it was decided to supplement him with an automobile. An ordinary White touring car was secured, and there was only time for a warming up heat before the actual trial; prior to that time, viz., August 27, neither horse had been put alongside an automobile, and even then no assurance could be had that they would not resent the presence of the steel flyer. As the result proved, however, the trial was a complete success.

The great crowd which had assembled to witness the trial was treated to an exhibition full of sensational features. It had been prearranged that Cresceus should take the rail, that his running mate, Mike the Tramp, should run side by side with him, and that the automobile should follow on the outside a little behind the runner and should gradually close in.

The spectators were on the qui vive as the trotter, the runner and the White car lined up for the start. It was expected that Cresceus would regard the new speed agent with his usual stolidism, but with the runner the outcome was more uncertain, for, as Dr. Ives, his driver, remarked as he drove into the track, "It's even money that Mike jumps the fence."

Cresceus started out with the long, powerful strides which have made him famous, and the wise ones immediately predicted that the record was in danger. Mike also started off bravely, and, by comparison with

the flying feet of the two horses, there was something uncanny in the way that the third moving object, the automobile, advanced apace, the low, rhythmic sound of the engine being unheard in the clatter of hoofs.

Coming past the grandstand finishing the first half mile, the steam car had moved up considerably, according to schedule. When the three-quarter pole was reached Mike for some reason dropped behind, and the driver of the automobile, realizing the situation, jumped his car into the place beside Cresceus, and, keeping the front of his car close to the wheels of the flying sulky, entered the stretch, while the crowd howled with enthusiasm.

Coming up the stretch the chauffeur opened his throttle by degrees and, inch by inch, drew upon the trotter. Both Cresceus and the machine made a magnificent burst of speed in front of the grandstand, crossing the line on even terms, in 2:08¾, breaking the old record by half a second.

### Chicago's Meet on Sept. 26.

The most powerful of automobiles and the most famous of chauffeurs will contend in the race which is to be held at Chicago on September 26, under the auspices of the Chicago Automobile Club. The contestants will be Barney Oldfield, holder of the world's record for a mile and other distances, who will ride the fast Winton, "Bullet"; Mooers, who ride in the Gordon Bennett Cup race in Ireland, who will drive the 100-horsepower Peerless; Carl Fischer, in a special 100-horsepower car that is now being constructed for himself, and Earl Kiser, who will also ride. The famous "999" car, in which Barney Oldfield made his mile in 55.45 seconds, will be driven by Tom Cooper. Every car in the race will be of not less than 80-horsepower, and it is possible that Washington Park track, which has seen many fast races, will witness new records from one to twenty-five miles.

### Roller Bearing Co.'s New Plant.

The American Roller Bearing Co. are losing no time in preparing to entirely recover from the fire which devastated their plant at Boston a few weeks ago. They have decided to locate at South Framingham, about twenty miles out of Boston, and have secured a factory 250x60 feet there. This is now being equipped, and when completed the concern will have more than double the capacity of the old plant.

### Omaha to Denver Race.

An automobile race against time has been planned by Le Roy Austin and John Dye, the latter an employee of H. E. Fredrickson, Omaha, Neb., the wager being \$50 a side, and the conditions being that Austin and Dye, in the former's Winton touring car, run from Omaha to Denver within forty hours.

The Massachusetts Automobile Club has abandoned its race meet projected for this fall.

## A. C. A. GOES TO BOSTON

**Big Pleasure Tour a Certainty—Starts Sept. 25 and Reaches Hub in Two Days.**

The plan for a big pleasure tour from New York to Boston and back, by the members of the Automobile Club of American, is going through. On Tuesday the governors held a meeting, and learning that already thirty cars had been declared for participants in the trip, authorized the committee on Runs and Tours to go ahead and arrange the details for it to begin on September 25. The trip out will be from New York by way of New Haven and Springfield. Two days will be spent in going, and Sunday will be spent in Boston. It is expected that the return will be made by way of Springfield and Great Barrington in the Berkshires, and then by way of Poughkeepsie down the Hudson to New York. Three or four days will be consumed in the return journey.

There will be no rules and no checking. It will be a sort of a go-as-you-please run, with an appointed place for a rendezvous each night, but there will be no penalty for failure to arrive at the rendezvous except the forfeiture of the opportunity for swapping yarns of the experiences on the road. It is to be a pleasure trip purely, and as such it is to be the biggest run ever undertaken by any club. Being a pleasure tour, the behavior of the cars in the hands of amateur operators, not subjected to any limitations concerning repairs and attention on the road or at the garages.

### Cup Race Without the Duke.

After all, the Duke of Mecklenburg-Schwerin's "disgusted" refusal to permit the Bennett Cup race to be run on his estate will make no difference. Homburg will probably be the starting point for the 1904 contest. On Tuesday morning Herr von Brandenstein, secretary general of the German Automobile Club, arrived there from Frankfurt in a 60 horsepower Mercedes belonging to Herr Paegle. A call was made upon Herr von Manz, the burgomaster, and the entire party made a tour of inspection over a course upon which it was proposed to run next year's race.

The route is a romantic one, traversing a pine forest and meadows. There are several sharp turns in the road and some heavy grades. The course is about 160 kilometres, or a little less than 100 miles, in length, and extends from Homburg to Ober Ursel, along the so-called Kanonenstrasse, by way of Schmitten to Braunfels, and then by way of Giessen back to Saalburg.

The Electric Vehicle Company will hold its annual stockholders' meeting at Jersey City, N. J., on Tuesday, September 15. Directors will be elected and other business transacted.

## MAXIM'S DUST REMEDY

### Mixture of Glue and Molasses Applied to Roads Makes Them Hygroscopic.

An inexpensive yet effective preventive of the dust nuisance is suggested by Sir Hiram Maxim. Writing to the Club Journal of the Automobile Club of Great Britain he says:

"About two years ago I noticed at Barrow-on-Furness that if we did not sprinkle our earth floors the dust and grit would fly about the works in clouds, and do considerable damage to our fine machinery; whereas, if the floors were sprinkled to keep the dust down the dampness condensed on the machinery and on our work, so that they had to be kept heavily covered with oil. The fact that the water would evaporate out of the earth and condense on the tools at certain times of the day and night suggested to me that something might be done to render the earth to some extent hygroscopic. It appeared to me that if the earth had a certain affinity for water it would not be so apt to part with water upon a slight change of temperature. I therefore had prepared a mixture of cheap glue and molasses dissolved in a very large quantity of water. The floors were repeatedly sprinkled with this, with the following results: It stopped the exhalation of aqueous vapors, the earth did not require sprinkling so often, and, what was more, the particles of dust were glued down. It is well known that the cheap grades of syrup are hygroscopic. This mixture has done for us excellent service. It keeps the water off the tools and finished work, and is a perfect preventive against the flying dust. Doubtless it will be remembered that when Professor Tyndall wished to produce a blast of pure air free from dust that he passed it through cottonwool which had been made sticky with gelatine.

"The cost of the solution used at Barrow-on-Furness need not be more than a shilling a barrel. There is one more point that I should like to touch upon, and which might be of use to the automobile world. Suppose that we employ a fair grade of strong glue and a moderately good kind of molasses or glycerine, we can make a very strong substance which, when dried down to a certain extent, closely resembles soft rubber. It may be as soft and starchy as a printer's roller, or may be made to any degree of stiffness by increasing the quantity of glue or diminishing the quantity of molasses. Suppose now that we wish to make this mixture insoluble to some extent, we can mix with it a solution of bichromate of potash or some similar substance. The solution should then be kept in the dark, and the roads might also be sprinkled at night; the sunlight would then render the mixture difficult to dissolve. If we mix molasses and glue, or glycerine and glue simply, there is a little bacillus which very soon finds the jelly and establishes a colony which converts the whole

mass into a soft and sticky paste with a very offensive odor.

"Of course, some strong mineral poison like bichloride of mercury is the best to prevent this, but this could not be used in a workshop, so I recommended our people to use a small quantity of carbolic acid. I do not know what mixture would be best for outdoor purposes, but I should say a pound of glue to a pound of molasses or syrup, half an ounce of carbolic acid, and fifty gallons of water. This does very well in a shop, but there, of course, we sprinkle often until the floor has been rendered firm and hard, whereas on a road, where only a single sprinkling would be employed, perhaps the quantity of water might be reduced to fifteen or twenty gallons."

### Boston's New Club House.

Contracts for the new home of the Massachusetts Automobile Club have been placed. In dimensions the building, which will be erected in Boylston street, Back Bay, near Fairfield street, will be 80 feet front, 80 feet on the rear line and 96 feet 9 inches deep. It will be three stories high, constructed of stone, terra cotta, brick and galvanized iron, and will cost, above the land, \$40,000. Plans were made by George F. Newton, of Beacon street, who has filed them with the department of building inspection.

The building will be solidly constructed, the walls of the first story to be 24 inches thick, the second story 20 inches and the third 16 inches. It will have steel and concrete floors, with granolithic finish, elevators, steam heating plant and artistic finish. It will set back fifteen feet from the street line, and will be used for automobile storage and club.

### Ready for License Rush.

Arrangements have been made by the Massachusetts Highway Commission to cope with the rush of applicants for licenses which is anticipated this week. Five clerks have been added to the office force in the automobile department, and even with this increase the commission is anticipating a week of night work. Up to date there have been a few less than 1,500 applicants, but each mail brings inquiries for blanks from others, and as all of these must be returned about September 1 the clerks have an idea of the extent of the task ahead of them.

There will be no delay in the assignment of number plates, for already 2,300 have been received. These include the lower numbers, some of which have already been distributed. The figures are of white on a bright blue background, and will be easily legible at a distance.

### Stop and Examine.

Many motorists, if their motor stops or is giving trouble, rush off at once to the nearest repairer, when, had they only spend a few moments in looking round the various parts of the engine, etc., they would have discovered the cause of the trouble and remedied it by themselves in a few minutes.

## GERMANY'S MOTOR CORPS

### Twelve Automobiles Will Participate in the Forthcoming Manoeuvres in Saxony.

In the annual manoeuvres of the German army in Saxony this month twelve automobiles will be employed. The headquarters staffs of each of the two contending armies will be provided with four each, and the four commanders of the participating army corps will each have one.

The War Department owns six of the automobiles which are to be used, and the other six will be contributed by various German makers. Those owned by the government are a four-seated Mercedes, a six-seated Mercedes, a ten-horse power Daimler and a twelve-horse power Benz and a sixteen-horse power Duerkopp. Emperor William will use one of the four-seated sixteen-horse power Mercedes cars belonging to the government. The Crown Prince of Saxony, commanding the Twelfth Army Corps, will use the sixty-horse power Mercedes which recently won a trophy at the Ostend international competition.

Of the twelve automobiles to be used four will be operated by civilian chauffeurs and eight by soldiers.

### Turns Out Chauffeurs.

A "school for chauffeurs" has been established by a Parisian automobile concern. Its object is to make it possible for professional chauffeurs to obtain a thorough practical and technical training. The course is divided into two branches—automobile construction and automobile driving. In the early morning machinists may learn all the details of automobile mechanism, and two or three times a week may go out in the concern's automobiles, accompanied by experienced drivers, so that they may become familiarized with their manipulation under practical conditions.

### Peculiar Parisian Justice.

They do some things queerly in France. For instance, in the trial of M. Charley, the Paris agent for the Daimler Company, for selling Count Charles Seilern a second-hand Mercedes car for a new one, resulted in an order that the Count should pay M. Charley \$400. This judgment has been cancelled in the Paris Court of Appeal, the decision being that the Count is entitled to \$1,000 compensation, the balance of the \$400 due to M. Charley to be paid out of the sum, M. Charley paying all costs.

### Automobiles Save Money.

As a result of careful investigation of the relative cost, it has been decided by the Board of Public Works of Saginaw, Mich., to substitute an automobile for the horse and buggy used by their superintendent. The estimate for keeping a \$300 horse and buggy for a year, including depreciation in value, is estimated at \$340, as against \$120 for keeping a \$650 automobile.

### Says O'Gorman Prevaricates.

The Central Automobile Exchange, Providence, R. I., does not propose to return to Thomas A. O'Gorman the price he paid for an automobile which it claims he badly damaged by treating it to such wear and tear as collisions with an ice cart and a sidewalk.

Mr. O'Gorman has sued the exchange for damages in the sum of \$4,000. He claims that an automobile purchased for \$2,000 proved unsatisfactory, and he seeks the amount paid.

The exchange, however, states that the car is exactly what it was represented to be. When O'Gorman bought it he was informed that it was not brand new, but had been used for exhibition purposes, and was required to pay, not \$2,000, but a substantial reduction from that sum, it is said. Further, it is claimed, he allowed green men to operate the automobile, with the result that it was subject to breakage not anticipated. Any machine, it is said, is liable to need repairs from time to time, but not to the extent that this one needed them. Once, it is alleged, the automobile was sent against an ice wagon and again against a sidewalk. And when left at the warerooms of the exchange the machine's upholstery was in soiled condition, it is declared. The exchange says that the machine can be run without trouble; that it is entirely as strong as warranted, and that a jury will have to say from the evidence and from observation whether O'Gorman's claim is a reasonable one.

### Upset Car, Then Refused to Pay.

In the suit of Cyrus S. Dauler against the St. Louis Motor Carriage Co., of St. Louis, an action growing out of an automobile accident on the Grant Boulevard, Pittsburg, the defendant company last week filed an affidavit of defence in which they ask certificate of set-off for \$700. The affidavit says the plaintiff bought a machine for \$1,200 and paid \$500 on it. He insisted he could operate it, the defendant company alleges, and owing to his lack of knowledge in operating an automobile he lost control of the machine and it overturned. Immediately after the accident the Seely Mfg. Co., the defendant company's agents in Pittsburg, the affidavit sets forth, examined the parts of the machine which the plaintiff said were defective, and found the same to be in perfect working order.

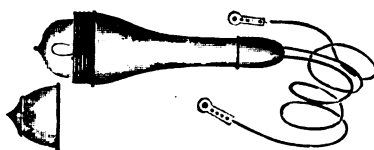
### Two Kinds of Overcharging.

Excessive and injurious overcharging may take place in two ways, says the Exide Battery Book—by charging too long and by charging too frequently, or every time a vehicle has been run a short distance; for instance, if with a battery that will run a vehicle forty miles the vehicle is run five miles, then charged, taken out again, run ten miles and is charged, then is given another run of ten miles and is charged, and again a third run of ten miles is made, followed by a charge, the vehicle has been run only thirty-

five miles, but the battery has been charged four times. The greatest wear on the plates of a battery occur during the final part of a charge. In treating the battery in this manner it was charged three times more than necessary, and even then did not make the mileage it should have made on one charge. In other words, where a vehicle is in daily use for short runs do not charge until over 50 per cent of the capacity has been exhausted. By following this course, not only is money saved on the current bill and the life of the plates increased, but the battery will give a greater mileage.

### Miller's Safety Seachlight.

The danger of using unprotected lights about steam or gasoline cars has been frequently dwelt upon. It is a real danger, as experience has proved more than once. Absolute immunity from this, as well as great convenience, is attendant upon the use of the hand searchlight illustrated. It is nothing



more nor less than an incandescent light inclosed in a glass bulb, the current being supplied by the dry batteries or accumulators used for sparking the motor. The lamp is supplied with sufficiently long wires to enable it to be carried to any part of the engine that may need examination. A hardwood tube incloses the lamp, and a screw cap protects the bulb when not in use. It is being marketed by Chas. E. Miller, 97 Reade street, New York.

### Does Works of Sixty Horses.

California has an automobile harvester which does the work of sixty horses, and, while it is a very expensive "farmhand," it pays, under the management of a company which contracts to do the harvesting for the farmers through the country.

The machine is 60 feet long and 30 wide, uses oil for the production of the power by which it is operated, and requires the attendance of eight men. It goes at the rate of three and a half miles an hour, mowing a swath thirty-six feet wide. When it is in operation the grain is thrashed as it is mown, the grain falling in sacks on the opposite side from where it is cut, while the straw drops into a cart behind.

### Deer Story From Paris.

There was an unusual element of excitement in a race wherein an automobile figured on a road near Paris last week on Monday. Two well known motorists were in the car driving along when two deer sped along the road as if challenging to a race.

One of the creatures was ahead, and the automobilists endeavored to overtake it, not dreaming that the one behind would attempt to pass. It was a stag, however, and in its haste to rejoin its mate it jumped clear over the automobile, both animals escaping.

### To Make 3,000 Rambler Cars.

The best idea of the growth and extent of the Rambler business, and likewise the confidence felt in its permanency, can be obtained by a survey of the immense plant at Kenosha, Wis. When the magnificently equipped and appointed Sterling bicycle factory at that place was purchased by Thomas B. Jeffery & Co. there was no thought of insufficient capacity felt. But the need of more space was soon seen. Additions have been made from time to time, until almost the whole of the seven acres of land purchased with the factory has been covered, and the increased business has necessitated a recent purchase of twenty-six acres adjoining the present site. The first building to be erected thereon, which is of concrete construction throughout, and now almost completed, is 275x256 feet, and designs are being prepared for a further addition to the north of the new one. An extensive power plant is to be installed in the new building, although this was not contemplated when it was first designed; but Thomas B. Jeffery & Co. have resolved that there should be no delay in placing the three thousand cars they anticipate building in 1904 upon the market at the selling time.

It is characteristic of the head of the concern that, upon finding difficulty in obtaining the proper grade of gravel for the half mile testing track, he immediately made an investigation and discovered less than a mile from the new plant a piece of land containing just the gravel he desired. The lot was purchased and the company is now independent of the gravel salesmen.

### Fire Engine Was not Licensed.

While speeding an automobile fire engine on Michigan avenue, Chicago, on Tuesday of last week, E. J. Mitchell, representative of a New York concern, was stopped by a park policeman.

"I want to know what right you have going at that rate of speed and sounding your whistle on a boulevard?" said the officer to the motorman.

"Come back here and talk to me," said Mr. Mitchell from his position on the step.

"We're from the Fire Department; see Marshal Musham about it," said the marshal's son, who was on the machine, the object of the trip being to demonstrate its practicability.

This statement did not satisfy the officer, who stepped up to the rear of the machine and took Mr. Mitchell's name and Chicago address. The machine was then driven slowly back to the engine house, the last part of the run being made without further adventure.

### Officers for Syracuse Club.

At a meeting of the Automobile Club of Syracuse, held on August 24, Willard L. Brown was elected president, in place of Terrence D. Wilkin, deceased. George S. Larrabee was elected second vice-president in place of Mr. Brown.



## GUDGEON PIN LUBRICATION

### Much Difficulty is Attendant Upon Getting Oil to This Most Important Part.

The practice usually followed is to supply a quantity of lubricating oil in doses to the crank chamber and trust to its being splashed up against the piston and cylinder walls and to work its way—the best way it can—to the gudgeon pin bearing. Sometimes an additional drip lubricator feeds oil to the cylinder walls just at the bottom of the piston stroke. Unfortunately, only thin oil can be fed from the drip lubricator to the cylinder, the very part that requires oil with most body in it, in view of the high temperature of the working parts to be lubricated.

So much depends on efficient lubrication of the piston and cylinder in order to maintain good compression and prevent the piston rings from "setting" that it is worth while to pay particular attention to this part of the engine's anatomy, says E. W. Walford in the *Autocar*.

In some engines the bottom of the cylinder is shut in by a plate, a slot being cut in the plate to allow the passage of the connecting rod. At the circumference of this plate is turned a groove of the same diameter as the lower end of the piston. The oil thrown up through the slot in this plate falls on the top of the plate and collects in the groove; similarly the oil dribbling down the cylinder walls finds its way into the groove. The plate and groove are so arranged that the piston at the bottom of each stroke dips its end into the groove and lifts with a supply of oil. This is good practice.

In small engines there is no great difficulty in lubricating the gudgeon pin bearing, but a difficulty does arise with engines of large bore, and consequently long gudgeon pins and bearings. Especially is this the case in those engines in which it is not possible or not convenient to provide a drip lubricator to the cylinder itself.

The writer has recently overcome a difficulty of this kind, and did so in the following manner: It had been found necessary to raise the compression, and this had been done by fitting an aluminum plate on to the piston by a bolt passing through the centre of the piston. The head of the bolt was on the top of the piston, and the nut and screwed end of the bolt came through to the under side immediately above the middle of the gudgeon pin bearing. The screwed end of the bolt was first riveted over close to the nut to prevent the latter from unscrewing, and then the end of the screw was brought to a point.

The top of the connecting rod was drilled right in the centre, just beneath the pointed screw, the hole being countersunk or enlarged. The gudgeon pin was drilled lengthwise, and also at right angles in one place, that place being exactly opposite to the hole in the connecting rod.

In this way the oil splashed up by the

cranks and collecting on the under face of the piston dribbles off the lowest part of the piston face, this part being the pointed screw above mentioned. The oil thus feeds into the hole in the connecting rod and fills the gudgeon pin and passes out to the cylinder walls.

To assist in lubricating the pistons and cylinder walls the pistons can be made as skeletons—that is to say, of ordinary construction, down to just below the gudgeon pin; but below that point they might be cast as a kind of framework acting merely as a guide. This construction would not reduce the necessary strength of the pistons themselves, but would lighten them and cause them to heat less, inasmuch as there would be less metal in their construction to retain the heat.

Some gudgeon pins are more prone to seize than others, to obviate which they may be made free, but a tight fit, in the pistons, so that they can turn in the latter as well as the connecting rods on the gudgeon pins. By making the gudgeon pins a tight fit in the pistons, under ordinary circumstances the connecting rods will turn on the gudgeon pins; but in the event of these bearings seizing, the connecting rod and gudgeon pin will move together. To prevent the gudgeon pins from shifting across the piston a groove may be turned in the piston opposite the gudgeon pin and a piston ring sprung in.

In some engines, to prevent an excess of oil collecting in the crank case, an overflow pipe is fitted. Again in another engine, the Belgica, exhibited at the last Paris Exposition, the oil is supplied by a constant level device comprising a float similar to that of a float feed carburetter. It is difficult to see how the constant level is maintained in these cases while the engine is running, as there is then practically no "level" of oil in the crank case at all.

It has been suggested that a small quantity of water should be permitted in the crank case, partly to lower the temperature of the working parts and partly to act as a lubricant.

This is common practice in high speed vertical steam engines having inclosed crank cases, but the conditions are by no means identical. In the cases where water is employed in steam engine practice the oil used is generally of a saponifying nature, so that it is churned into a lather. A saponifying oil can hardly be used in internal combustion engines for obvious reasons, so that it is doubtful whether the employment of water in such engines would be beneficial. Where the crank case is, as is usual of aluminium, water could not be used at all, owing to the bad effect it has on aluminium.

### To Hold the Piston Ring.

Some makers to prevent the piston rings turning round in their grooves drill a hole in the slot in the ring and screw a small peg into the base of the groove. Many existing pistons can be treated in this manner. However, it is not always satisfactory to do so, for there is not always sufficient metal in the piston into which to screw the pegs.

## STANDARDIZED CRANKSHAFTS

### There are Cons as Well as Pros to be Considered in the Matter.

At first sight the adoption of a standard for crankshafts seem to be very desirable and also very easy; but upon looking into the matter further the advantages of the plan do not seem to be very great, while its difficulties become quite apparent. In the first place, remarks the American Machinist, we may say that no particular advantage, so far as the cost of manufacture is concerned, can be obtained from the standardization unless all these crankshafts are to be made by one concern. It is obvious that if one concern were to make all such shafts its expense in dies and tools would be considerably reduced if all the shafts made by it for a given size of cylinder or engine were to be identical. But if two or more concerns are to make such shafts, then it would be no more expensive for them each to make its sets of dies and tools differing from the others than it would be to make identical sets, and, in fact, perhaps it would be less expensive; so that in this view of the case, we can see no advantage to be gained as regards the cost of production.

One who proposes to build a gasoline automobile engine can, at the present time, buy a crankshaft, which is a regular article of manufacture. He can buy it either in the rough or finished state, and it is probable that he can buy it at as favorable a figure as he could if several concerns were making the identical shaft; the fact being that for all practical purposes a standard now exists for those who can or choose to conform to it; but it probably would always be true that certain builders would prefer proportions differing from any standard that might be adopted and would be able to persuade customers with money to spend that it was worth while to spend it for a shaft differing in some particulars from the commonly accepted standard and believed to be, on that account, more or less superior to it.

### Having Fun With Cops.

Chicago automobilists appear to be bent upon having fun with the police of that city. Their latest dodge, as reported, is to have the plate carrying the number of the vehicle suspended in such a manner at the rear that it can be pulled out of sight when passing a policeman.

In several cases where policemen have seen automobiles going at an unlawful speed and have taken out pencil and notebook to record the numbers the number tags apparently curled up beneath the vehicles and vanished. It is said that in the case of an accident recently a policeman found in the wrecked automobile a string connected with the number tag and passing up to the driver's seat.

The German Automobile Club has presented gold medals to the three German representatives who drove in the Gordon Bennett race.

### Flywheel Weights and Compression.

The necessity of giving more attention to the flywheel is dwelt upon by M. Gaillardet. This, he said, should be looked upon as an accumulator of energy capable of giving up a certain part of its energy to overcome inertia when starting a car. In other words, more power may be needed to start the car than that developed by the motor itself, and thus during, say, a quarter of a second the energy stored up in the flywheel is added to the power of the motor to move the vehicle. For this reason the weight of the flywheel should be calculated according to the inertia to be overcome—that is to say, the weight of the car and the speed at which it is started.

M. Gaillardet is in favor of high compression on account of the higher efficiency it gives to the engine, but in practice it is impossible to exceed a certain limit, because very high compression would mean great difficulty in starting the motor and in regulating the admission, while with small flywheels the force of the shock would cause the motor to run irregularly, and it would be nearly impossible to avoid leakages at the valves and joints. For these reasons the compression ought not to be much more than five kilos per square centimetre. He also concludes that the motor gives highest efficiency with a comparatively long piston stroke and high lineal speed, and in this respect he is somewhat at variance with current practice, which gives a preference to short stroke motors.

### What Happens to Soft Tires.

As more than 50 per cent of tire troubles are said to be due to them, it is well to consider what happens when soft, deflated tires are used. The whole object of a pneumatic tire is to support the weight acting on the rims by means of compressed air. If, therefore, there is no compressed air in the tire, then it is quite unfit for use, and it would be too much to expect it to do the same service as a fully inflated tire. As stated above, it is not the tire, but the compressed air within it which carries the weight resting on the tire. If, therefore, there is insufficient air pressure, or no pressure at all, the tire gets jammed between the rim and the ground, and, if used in this state for any length of time, will soon be destroyed. The damage caused in this way consists in the cutting of the edges of the outer cover, or in the abrasion of the outside layer of rubber in the place where it comes into contact with the edges of the rim and the inner tube, which, owing to its being always nipped, gets full of numerous small holes and in time becomes quite decomposed.

### Automobiles at St. Louis.

It is probable that arrangements will be made at the St. Louis Exposition for admission of automobiles to a part of the grounds. The side of the inclosure opposite that in which the main entrance is to be located runs alongside one of the principal drives of Forest Park, but is so far from the main

entrance that it is not likely to be extensively travelled. It has been suggested, and the plan is now under consideration, that a piece of ground be set aside for the care of automobiles owned by visitors and exhibitors, the latter being at liberty at all times to take their vehicles out for demonstrations. This plan, it is supposed, may obviate the necessity of erecting an expensive building for stabling purposes, the cost of which exhibitors do not feel disposed to bear.

### Who Favored Kenosha's Ordinance.

Kenosha, Wis., is the latest of the country villages to enact a speed ordinance, which has been set at ten miles except on the main street, where it is limited to five miles per hour. There apparently seems to have been very little occasion for such an ordinance, but, as is usual with country councils unfamiliar with the subject and generally regardless of the rights and privileges of others, it seemed impossible for them to resist the temptation to gain notoriety and, following the example of other villages between Kenosha and Chicago, to increase the already large number of ridiculous ordinances. A canvass of the vote on the question revealed the fact that the intelligent members of the Council voted against it to a unit; among those insisting upon its enactment were a beer agent, a tug owner, a laundryman and a socialist.

### Jeffery to the Rescue.

Everything comes to him who waits, but few care to take their first automobile ride under the conditions involuntarily adopted by a Kenosha man recently. Two cars of the electric street railway line from that town to Milwaukee had an argument as to the right of way on the single track, resulting in some of the passengers being injured. Mr. Thomas B. Jeffery was returning from Racine with Mrs. Jeffery in their Rambler car, and, having the only conveyance in the neighborhood, volunteered to carry the most injured of the passengers to Kenosha for medical treatment. The run was made in record time and the promptness undoubtedly saved the man's life.

### Delivered Mail From Automobile.

A practical illustration of the value of the automobile for public service was given on August 9 in connection with the delivery of rural mail on one of the rural routes covered from Davenport, Iowa. John W. Buck invited Robert Arp to make his regular trip that day in his automobile, and the invitation was accepted.

The route is twenty-seven miles long, and was covered in exactly two hours and a half, Mr. Buck and the mail carrier leaving Davenport at 8 a. m. and reaching the city on their return at 10:30 a. m. During the trip 120 stops were made for the delivery and collection of mail.

On Tuesday last the drastic Massachusetts automobile law became effective. A great deal of trouble is anticipated, owing to its severe and contradictory pronouncements.

### Escaping Gas Caused Squeak.

A motorist was very much troubled by a peculiar squeaking noise that was somewhere about the vehicle, but was for some time absolutely undiscoverable. Every possible and impossible place was examined, and oil put upon all necessary, and in some cases unnecessary, parts without having any effect whatever.

It appears that the engine fitted in this particular vehicle has the inlet valve seats screwed into the combustion head, the joint being made by a copper and asbestos washer. One of these washers had slightly cracked, and the escape of the gas on the compression stroke caused the peculiar squeaking noise referred to. It was not until the engine, which was a four cylinder one, came to be tested for compression, each cylinder separately, that the noise was discovered. Two of the cylinders were tested and found to have satisfactory compression, but when the third one was reached the second time the compression was tested, the starting handle was pulled up rather quickly and the squeak was heard. The operation was repeated three or four times, and the same squeak occurred on each occasion. The valve was removed for examination and found to be in good condition, but when the packing ring was removed and examined the cause of the trouble was at once apparent.

### Numbered Like Convicts.

"Automobiles are going to be numbered—just like convicts," says the Los Angeles (Cal.) Times. "That's so the policemen can spot those going so fast you can hardly see them. The policeman will tear his pad from his pocket when he spies an auto bearing down at more than ordinance speed. If it's a small number he can take it all at once. If it's a long one he can get the first figure, and then wait until it comes around again. If he's patient and diligent, he can get the whole number in time."

"Councilman Bowen moved the adoption of an ordinance prepared by him, which provides for the numbering of autos. He explained that the 'cops' are not on speaking terms with automobilists or chauffeurs, and couldn't arrest them. If the machines are numbered the case will be simplified. The officers can take down the numbers when there is a violation of the ordinance and arrest—not the numbers—but the automobilists corresponding to them."

### Automobiles in Delaware's Metropolis.

Automobile interest grows in Wilmington, Del., and the constant increase of motor vehicles in the streets attracts attention. Among the local automobilists are Willard Jackson, who has a new Cadillac; Martin Beadenkopf and O. W. Ladd, who have Oldsmobiles; Dr. Ralph Stubbs, Cadillac; Mr. Morris, of the Penn-Rose Land Co., Rambler; Alfred Du Pont, H. A. Moxham, president of the Hazard Co.; Pierre S. Du Pont, Edgar M. Hoopes, Robert M. Smith and George K. Rudert. Mr. Rudert owns a steam vehicle driven by an engine of his own manufacture.

# Ready for Business

Several weeks ago we announced the winning of the

## GORDON BENNETT CUP

on

# Continental



# Tires



We followed it up with the

## VICTORIES AT YONKERS

the most important events in America. We are now pleased to announce that a complete stock of tires in every size has arrived from Germany and we are ready to fill any orders, for any quantity, the same day when received. ∴ ∴ ∴ Send for Price List.

### THE CONTINENTAL CAOUTCHOUC CO.

EMIL GROSSMAN, Manager.



298 Broadway, NEW YORK.

**"Old Nance" Pursued Them.**

Sometimes the automobilists give a horse a scare, but near Wauconda, Ill., a few days ago, an old mare caused a Chicago party to let out their machine to the top notch of speed.

"Old Nance" is a plodding nag owned by Farmer William Brooks, and it is not looked to for exhibitions of speed. She was standing in a field near the roadside when the Chicago party happened along.

"Now watch the old plug wake up," said the owner of the automobile; but Nance didn't scare worth a cent as the whizzing vehicle sped toward her. Then the man at the wheel tooted the horn with a vigor which caused the sleepy looking animal to raise its head in recognition of the fact that there was something doing.

Awake to the fleeting presence of the automobile in the road, Nance laid her ears back and put her best foot forward. She took the fence like a hunter. There was a rake attached to the harness upon her, and she took that also. The automobile scooted with all the speed it could develop, but the folks in the tonneau could almost feel the mare's hot breath upon their cheeks. The rake raised a cloud of dust in the road, which made it appear as if a tornado was sweeping along.

After awhile Nance was satisfied to quit the race. No time taken.

**Value of Competency.**

The times when a car is "en panne"—that is, broken down—are still unpleasantly great. It is perhaps no exaggeration to say that fully 90 per cent of them are embarrassing—that is, cause prolonged delay—solely because the professional machinists or drivers are only superficially acquainted with every detail of the mechanism, and consequently are unable to remedy matters at once. The thoroughly competent machinist, the man who has helped to construct automobiles and is thus guided by a full knowledge, can, in the majority of cases, put his finger unerringly on the defective part and will have his machine running again in less time than it will take the "rule of thumb" man to try one thing after another until he stumbles upon the cause of the difficulty.

**Clutch Trouble and Remedy.**

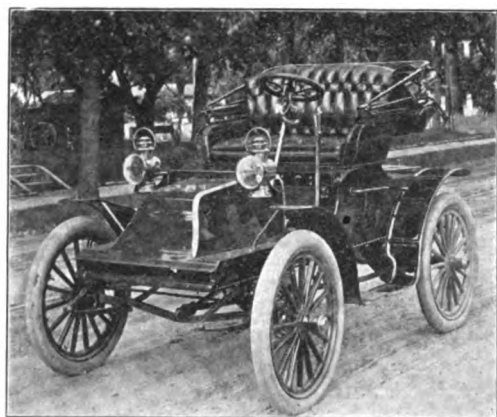
In a perfectly new car it may be found that on disengaging the clutch to put in the low gear, the male portion may spin so much that the gear cannot be engaged; the reason of this is that the leather of the cone requires wearing down, and this may easily be accomplished by starting up the engine with the low gear already engaged and then letting the clutch gradually in, at the same time stopping the car from moving by the handbrake. If this is done for a few moments the leather will be worn down nicely.

**To Loosen Tire Patches.**

When the tires suffer from punctures the chief trouble is to get the necessary patch to adhere to the tube, but it is also necessary at times to remove such patches, and if the operation of repairing has been successfully performed the removal is sometimes a matter of difficulty. The use of hot irons for the removal of any patches or bandages on rubber goods which have been stuck down by solution and not by vulcanization is recommended by a French chemist.

An ordinary domestic flatiron immersed in boiling water for a sufficient time to heat the iron thoroughly is specially mentioned, as by this means the correct heat is obtained and there is no fear of damaging the principal part. In the event of this method not being to hand, or a more convenient one is required, take a clean hammer head or other similar piece of metal, and heat this on the cylinder head, or, better still, on the exhaust pipe. To use the heated object it should be held close up to the patch, or, if the heat is not too great, actually upon it until the whole of the patch and the surface of the main rubber is heated, when the patch or bandage may be easily peeled off without the use of naphtha or other rubber solvent.

Successful experiments have been made in France with an invention, on the penny-in-the-slot system, by which the batteries of motors can be recharged from electric street wires.



This HAYNES-APPERSON RUNABOUT (\$1,250 complete) was run by a customer, from our factory home, 245 miles in one day (about 14 hrs.), on eleven gallons of gasoline and one gallon of water, on a hot day. How many "seasoned" cars can do this?

# THE HAYNES-APPERSON

is the only machine that has won every  
Endurance Contest held in America and  
every contest or race ever entered. . .

**17 RECORDS AND AWARDS**  
all earned by  
**Stock Machines.**

The machine *you* buy is the kind that makes this **Absolutely Unequaled Record.** Our catalogue gives the records complete. Send for it and ask for the "Little Book," too.

Inquirers are urged to visit our factory where every detail of Haynes-Apperson superiority can be seen and fully understood.

**HAYNES-APPERSON CO., Kokomo, Ind., U.S.A.** The oldest makers of motor cars in America.  
Branch Store, 381-385 Wabash Ave., Chicago.

Member of the Association of Licensed Automobile Manufacturers.

Eastern Representatives: Brooklyn Automobile Co., 1239-41-43 Fulton Street, Brooklyn, N. Y., and 66 West 43d Street, New York.

National Automobile & Manufacturing Co., Pacific Coast Agents, San Francisco.

JOHN MAXWELL, Oneida, N. Y., Agent for Central New York.

# SYRACUSE RACES

## SEPTEMBER 12

BY THE

New York State Fair Association

AND

The Automobile Club of Syracuse.

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OPEN EVENTS FOR ALL

Motor Cars <sup>d</sup><sub>a</sub> Motor Bicycles

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SPECIAL MATCH RACES

INCLUDING A THREE-CORNERED EVENT BETWEEN 40 H. P. FRENCH RACING CARS  
WITH FRENCH DRIVERS WHO COMPETED IN THE RECENT PARIS-MADRID CONTEST.

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TOURISTS SHOULD ARRANGE THEIR SCHEDULE TO  
ARRIVE IN SYRACUSE FOR THESE RACES.

Reduced Rates on all Railroads

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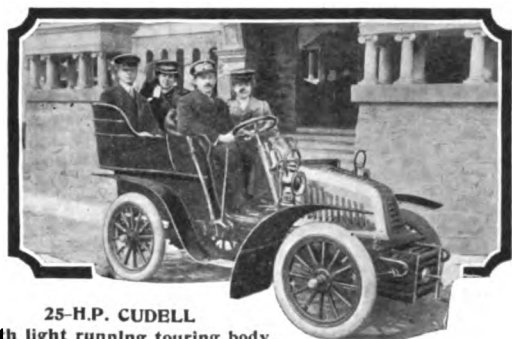
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ENTRY BLANKS ON APPLICATION.

**ENTRIES CLOSE**  
**SEPT. 9, 1903.**

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AUTOMOBILE CLUB OF SYRACUSE,  
SYRACUSE, N. Y.





25-H.P. CUDELL  
with light running touring body.

## CUDELL STANDARD CARS

8 H.P. 1 Cylinder Runabouts	20 H.P. 4 Cylinder Touring Cars
10 " 2 " Touring Cars	25 " 4 " " "
12 " 2 " " "	30 " 4 " " "
18 " 4 " " "	35 " 4 " " "
60 H.P. 4 Cylinder Touring Cars	

All fitted with honey-comb radiators, chain or bevel gear drive according to order.  
Our standard body for above cars is divided seat, King of Belgians Tonneau.  
Our satisfied customers will attest to the excellence of the CUDELL.

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Eastern Agent for St. Louis Motor Carriage Co., of St. Louis, Mo.  
UPTOWN GARAGE—C. L. Bell & Co., 250 W. 80th Street.  
BOSTON—Angier & Whitney, 43 Columbus Avenue  
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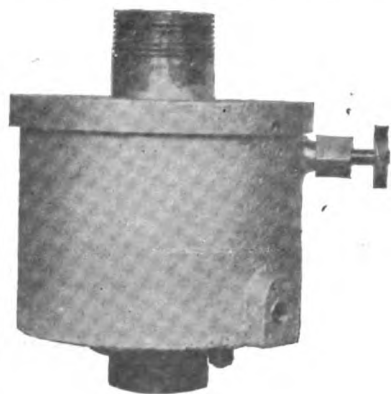
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**The Week's Patents.**

736,944. International Combustion Engine. Rudolphi Diesel, Munich, and Hugo Guldner, Augsburg, Germany. Filed Nov. 1, 1899. Serial No. 735,456. (No model.)

Claim.—1. In a two stroke internal combustion engine, the combination with the working cylinder and its piston, ports and valves, including an exhaust valve, of a scavenger pump separate from the working cylinder, a cooling space between the pump and the cylinder, a port in the cylinder near the end of the working stroke for admitting the air supplied by said pump to the working cylinder during the last part of the working stroke and the first part of the return stroke, whereby a thorough cleansing is effected and fresh air supplied, and means for closing the exhaust valve during the early part of the return stroke, substantially as and for the purpose specified.

736,909. Chain driving gear. Everett F. Morse, Trumansburg, N. Y., assignor to the Morse Chain Company, Trumansburg, N. Y. Filed March 10, 1899. Renewed March 21, 1902. Serial No. 99,329. (No model.)

Claim.—1. In a rocker joint for chains or other devices the combination with one of the hinged parts provided with an aperture and having a bearing surface, of the other hinged part, also provided with an aperture and having a bearing surface and a member and adapted to rock on either of them.

737,048. Cooling device for explosive engines. Richard J. Voss, Davenport, Iowa. Filed April 6, 1903. Serial No. 151,380. (No model.)

Claim.—The combination with a gas engine, of a cylinder having valved communication with the jacket of the engine, a valved piston in said cylinder, means for operating the piston, and a governing valve carried by the cylinder for admitting thereinto a quantity of air, thereby to diminish the quality of cooling air flowing through the cylinder jacket.

737,202. Electrical ignition device. Everett W. Brooks, Chicago, Ill. Filed Sept. 23, 1902. Serial No. 76,309. (No model.)

Claim.—1. In a gas engine, the combination with a valve casing having inlet and outlet ports and an ignition port leading to the cylinder, of an integral rotary valve body mounted therein having longitudinally separated ports adapted to register alternately with said inlet and exhaust ports, respectively of the valve casing, said valve body having formed substantially centrally therein and between the separated ports thereof an annular groove constituting, with the en-

clining wall of the surrounding casing, an ignition chamber in constant communication with said ignition port of the casing, a cam projection on one wall of said annular groove, an insulated spring pressed plunger mounted to extend inwardly through the valve casing and projecting at its inner end into said annular groove and into the path of said cam projection; and electrical connections connecting said plunger and cam projection respectively with opposite poles of a source of electricity, substantially as described.

737,205. Tire. Edwin B. Cadwell, New York, N. Y. Filed March 14, 1902. Serial No. 98,161. (No model.)

Claim.—In a vehicle tire, the combination with a tire composed of a body portion of high compressibility and a base portion of low compressibility having a plurality of slits running transversely therethrough, of bridges comprising flat pieces of suitable material inserted in each of said slits and having grooves therein adapted to receive retaining wires, and wires running through said tire resting in said grooves and adapted to retain said tire in its channel, substantially as described.

737,208. Variable Speed and Reversing Motion Driving Mechanism. Ferdinand Charron and Leonce Girardot, Paris, France. Filed March 22, 1902. Serial No. 99,460. (No model.)

Claim.—1. A variable speed and reversing motion driving mechanism comprising two gears with a toothed portion and a smooth portion arranged opposite one to the other, an axle on which said gears are mounted, an operating lever adapted to drive said axle, two racks the one of which is placed below the first gear and is free to engage the toothed portion of same and the other of which is placed above the second gear and is free to engage the toothed portion of same, a set of gears or movable set adapted to be continually rotated and driven lengthwise on its axle by the first rack, and a broad auxiliary pulion loose on its axle and adapted to be driven lengthwise on said axle by the second rack, substantially as and for the purpose set forth.

737,285. Battery Element. Charles B. Schoenmehl, Waterbury, Conn. Filed May 19, 1902. Serial No. 107,955. (No model.)

Claim.—1. A battery element, comprising a solidified and hardened flat depolarizer plate, broadest through its top edge.

2. A negative electrode for a battery, comprising a substantially flat solidified copper oxid brick, widest through its top edge.

737,286. Galvanic Battery. Charles B.

Schoenmehl, Waterbury, Conn. Filed May 1, 1903. Serial No. 155,104. (No model.)

Claim.—1. A battery element comprising an annular solidified oxid of copper depolarizer.

2. A battery element comprising a tubular solidified oxid of copper depolarizer.

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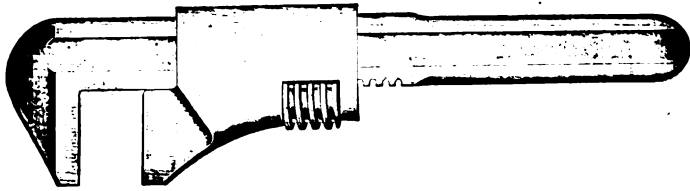
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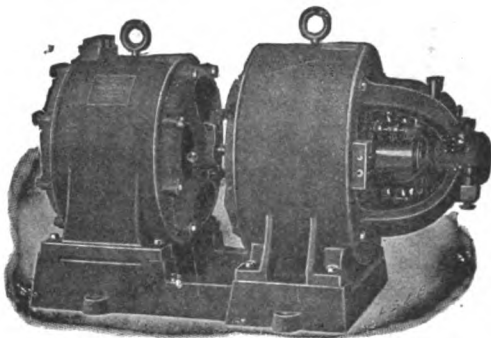
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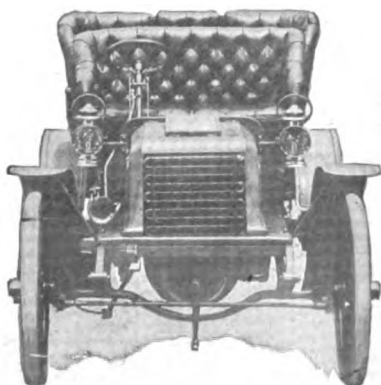
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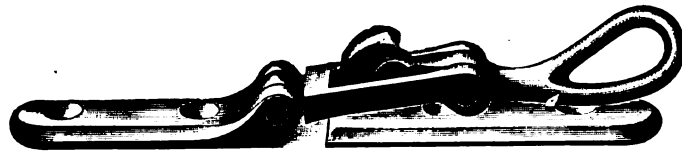
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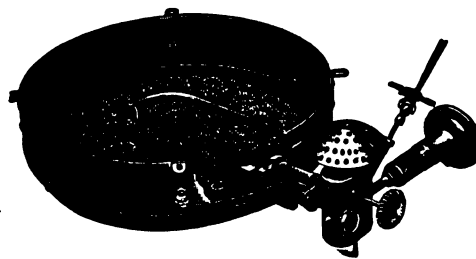


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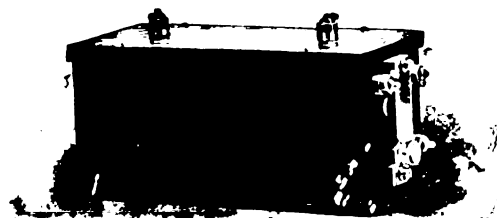
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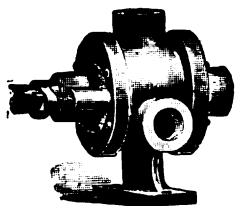


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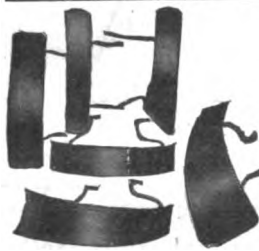


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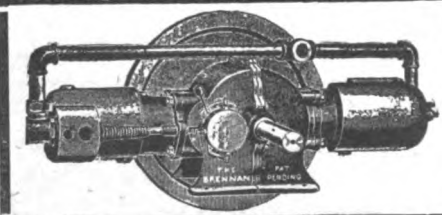
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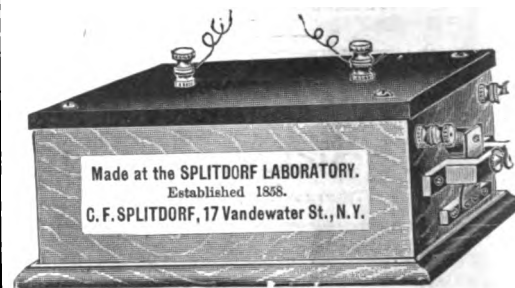
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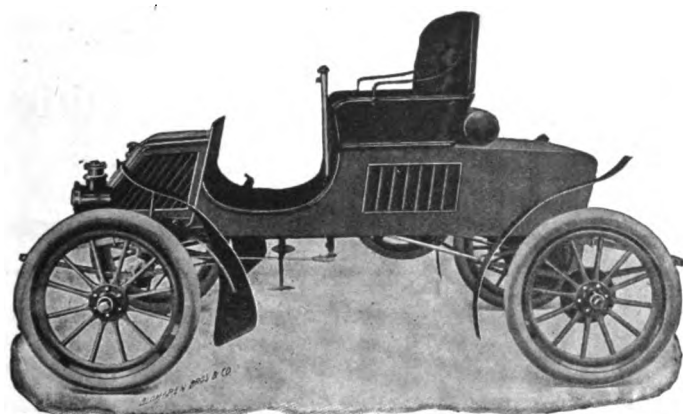
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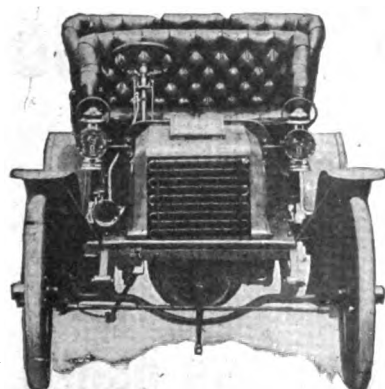


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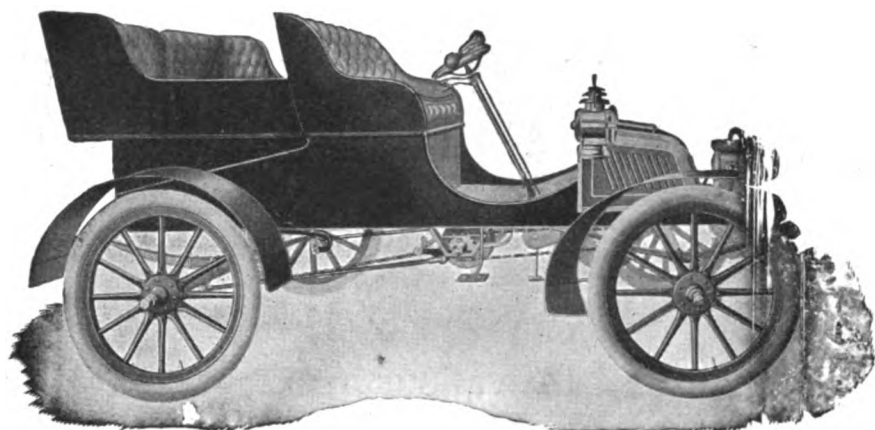
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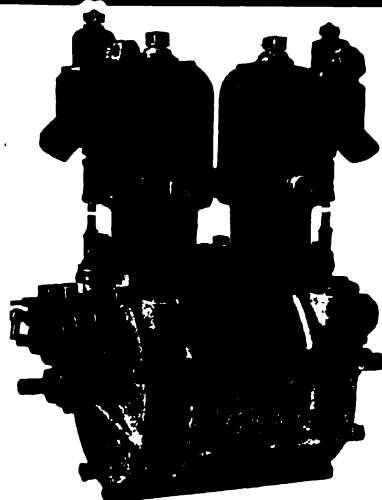
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The Differential Gear has Manganese Bronze Bevel Gear, fitted for either  $1\frac{1}{4}$ ,  $1\frac{3}{4}$ , or  $1\frac{1}{2}$  inch axles. Is made for Direct Drive, Rod Transmission, and also with Chain Sprocket.

The Transmission Gear is built on a new system. No Bevel Gears. Gears always in Mesh. Ball Thrust at each end of Shaft. Enclosed in Aluminum Case. Will transmit up to 20 H. P.

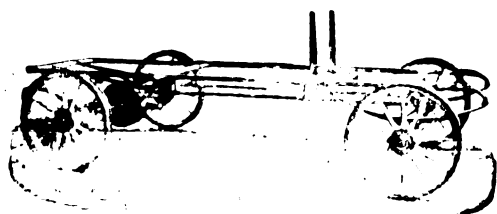
We make a Tubular Running Gear for Tonneaus that is a marvel of workmanship, finish and construction. All material is of the best and the Bearings are extra heavy. The Differential on this is fitted for either Sprocket or Bevel Gear.



**WYOMA DIFFERENTIAL SPUR GEAR**  
8 pitch—60 teeth.



**WYOMA TRANSMISSION GEAR**  
3 Speeds forward and 1 Reverse.



**TUBULAR RUNNING GEAR FOR TONNEAUS**  
80-inch Wheel Base. 54-inch Tread.

# STUDEBAKER ELECTRIC AUTOMOBILES.

THE  
AUTOMOBILE  
WITH A  
REPUTATION  
BEHIND  
IT.



EVERY STUDEBAKER sold has meant a satisfied customer. It makes friends and keeps them. Agents and dealers in territory we have not already covered should write for our catalog and terms. Our machines are unsurpassed for hill climbing and quiet running. They are built by a firm whose reputation is a guarantee of good work. What Studebaker stands for is known to every prospective customer for an automobile.

*Complete line can be seen at our branch houses in all principal cities.*

## STUDEBAKER BROS. MFG. COMPANY

Studebaker Bros. Co., of New York, Broadway and Seventh Avenue,  
Cor. 48th St., New York City.

Studebaker Bros. Mfg. Co. 378 to 388 Wabash Ave., Chicago, Ill.  
Factory and General Offices, South Bend, Ind.

## THE WHITE STEAM TOURING CAR THE WHITE SEWING MACHINE COMPANY CLEVELAND-OHIO

James B. Dill, the New York corporation lawyer, when interviewed by the Boston Journal regarding his recent trip from East Orange to the Maine woods, said of his White Touring Cars:

"Nothing but a steam car could do the work, and that is why I have taken all three steamers. A gasoline car could never climb those steep hills, but a steamer can do it as gracefully as a launch gliding over the water. With 500 or 600 pounds of steam behind it those cars could climb the side of a house—almost."



NEW YORK, 215 W. 48th Street  
BOSTON, 509 Tremont Street

SAN FRANCISCO, 300 Post Street.  
DETROIT, 212 Woodward Avenue.  
CLEVELAND, 300 Rose Building.

LONDON, ENG., 35-37 King Street, Regent Street.

Easily the BEST BUILT CAR in America.

# Locomobile

Runs like a little sewing machine.



A 4-cylinder Locomobile Touring Car. Front vertical motor.

## The Best Development in Gasolene Autos to date.

**L**UBRICATION is automatic, being started or stopped as the spark is switched on or off; **governor** acts on the mixture and also times spark automatically; **valves** removable and replaceable easier and quicker than any other gasoline car; spark plugs won't short circuit and are connected to cables by chains, instead of the usual ever-snapping wires; **throttle** on steering wheel permits of speeds from 6 to 40 miles per hour on high speed gear.

A handsome hanger of our 4-cylinder "King of the Belgians" car, printed in four colors and gold, will be sent to any dealer on application.

## The Locomobile Company of America, BRIDGEPORT, CONN.

### BRANCH OFFICES:

NEW YORK—Broadway, corner 76th Street.

BOSTON—15 Berkeley Street.

BRIDGEPORT—Factory, Seaside Park.

PHILADELPHIA—249 North Broad Street.

CHICAGO—1384 Michigan Avenue.

LONDON—39 Sussex Place, So. Kensington.

Members of the Association of Licensed Automobile Manufacturers.

# **NOTICE**

**To Manufacturers, Dealers, Importers,  
Agents and Users of**

# **GASOLENE AUTOMOBILES**

United States Letters Patent No. 549,160, granted to George B. Selden, Nov. 5, 1895, controls broadly all gasolene automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following-named manufacturers and importers:

Electric Vehicle Co.  
Winton Motor Carriage Co.  
Packard Motor Car Co.  
Olds Motor Works.  
Knox Automobile Co.  
The Haynes-Apperson Co.  
The Autocar Co.  
The George N. Pierce Co.  
Apperson Bros. Automobile Co.  
Searchmont Automobile Co.  
Locomobile Co. of America.  
The Peerless Motor Car Co.  
U. S. Long Distance Automobile Co.  
Waltham Manufacturing Co.

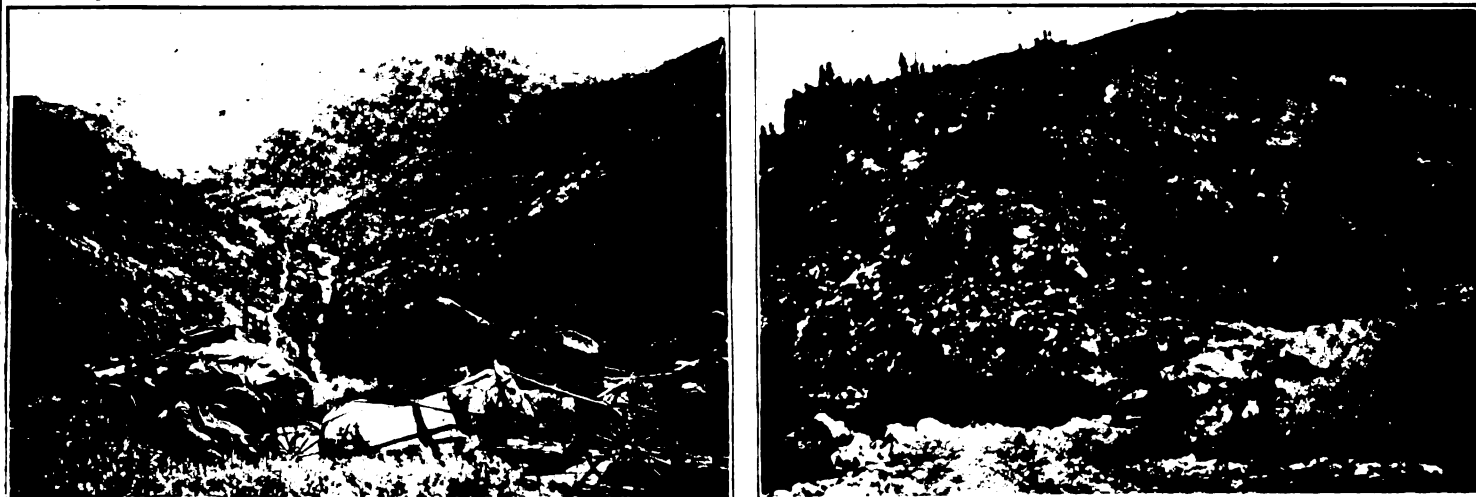
Pope Motor Car Co.  
J. Stevens Arms & Tool Co.  
H. H. Franklin Mfg. Co.  
Charron, Girardot & Voigt Co. of America  
(Smith & Mabley).  
The Commercial Motor Co.  
Berg Automobile Co.  
Cadillac Automobile Co.  
Northern Mfg. Co.  
Pope-Robinson Co.  
The Kirk Mfg. Co.  
Elmore Mfg. Co.  
E. R. Thomas Motor Co.  
Buffalo Gasolene Motor CO.

These manufacturers are pioneers in this industry and have commercialized the gasolene vehicle by many years of development and at great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacture. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasolene automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturers or importers will be liable to prosecution for infringement.

## **ASSOCIATION OF LICENSED AUTOMOBILE MANUFACTURERS**

**7 East 42nd Street, New York.**



**L**AST week we gave the total replacements upon the carburetter and ignition devices. Next in order is

## THE MOTOR.

It was originally thought that the pressure of compression which gave the best results upon the comparatively low elevations of the east and middle-west would not yield the required power for the altitudes encountered in the western mountain ranges, and simple metal blocks were provided for increasing the compression. The highest altitude in the Sierra Nevada mountain (7300 feet) was scaled, however, without any necessity for a departure from the standard equipment. Before ascending to the greatest height reached in the Rockies (10,400 feet), these blocks were used and the result gave the same abundance of power in the country above the clouds that is noticeable in all Packard cars the world over. While this was not a repair, but an adjustment only, it is mentioned here as an interesting fact concerning the adaptability of the Packard Motor to all ordinary and such extraordinary touring.

The first replacement of any kind upon the motor was made at Buena Vista, Colorado, where a small fibre washer upon the inlet valve stem was renewed.

At Chicago the exhaust valve was found to be leaking, and upon being removed showed wear upon its seat. There were not the facilities at hand for removing it, and consequently a new one was slipped into place and the old one placed in the tool-box for machining and further use when the trip was completed. A new exhaust valve roller and sleeve were also used on account of the same absence of facilities for repairs upon the worn parts.

At Buffalo, N. Y., the copper oil boat for the oiling of the connecting rod had worked loose and was replaced.

With the exception of the replacement of the fibre washer, exhaust valve, roller and holder and connecting rod oil boat the same motor with which the car started from San Francisco took it into New York City and propelled it every mile of the way. We want to call most particular attention to this, for it stands today without precedent.

Any one of the dozens of true sportsmen who journeyed up the Hudson on August 21st and formed the escort for "Old Pacific" during the last thirty miles of its ocean-to-ocean trip, can vouch in no lukewarm terms for the magnificent operation of the Standard 12-H. P. single cylinder Packard motor after more than four thousand miles of continuous travel over the hardest path that nature could devise and man select.

The last twenty miles were done at the same speed as the first twenty. Under similar conditions the results are always the same and the repairs the minimum.

The Packard is noted the country over for its endurance and unfailing reliability.

"Ask the man who owns one."

## THE PACKARD MOTOR CAR COMPANY

WARREN, OHIO

Member of the Association of Licensed Automobile Manufacturers.



## PREPARE FOR A RAINY DAY.

Get out your tops and storm aprons. You can run

# THE OLDSMOBILE

THE BEST THING ON WHEELS

just as well in the fall and winter as you did during the spring and summer.

No priming necessary with the Oldsmobile Carburetter.

**PRICE, \$650.00.**

Ask any of the following dealers to show you the Oldsmobile in winter garb.

### SELLING AGENTS.

ALBANY, N. Y.—Automobile Storage & Trading Co.  
ATLANTA, GA.—Oldsmobile Co.  
BINGHAMTON, N. Y.—R. W. Whipple.  
BOSTON, MASS.—Oldsmobile Co. of New England.  
BOSTON, N. Y.—Jaynes Automobile Co.  
CHARLESTON, S. C.—Army Cycle Co.  
CHICAGO, ILL.—Oldsmobile Co., Githens Bros. Co.  
CLEVELAND, OHIO—Oldsmobile Co. of Ohio.  
COLUMBIA, S. C.—J. E. Richards.  
DALLAS, TEXAS—Lipscomb & Garrett.  
DAVENPORT, IA.—Mason's Carriage Works.  
DENVER, COLO.—G. E. Hannan.  
DETROIT, MICH.—Oldsmobile Co.  
ERIE, PA.—Jacob Roth Auto Co.  
GRAND RAPIDS, MICH.—Adams & Hart.  
GREENVILLE, S. C.—Bates-Tannahill Co.  
HARRISBURG, PA.—Kline Cycle Co.  
HOUSTON, TEXAS—Hawkins Automobile & Gas Engine Co.  
INDIANAPOLIS, IND.—Fisher Automobile Co.  
JACKSONVILLE, FLA.—F. E. Gilbert.  
KANSAS CITY, MO.—E. P. Moriarty & Co.  
KNOXVILLE, TENN.—Rodgers & Co.  
LANSING, MICH.—W. K. Prudden & Co.  
LITTLE ROCK, ARK.—Arkansas Auto Co.  
LOS ANGELES, CAL.—Oldsmobile Co.  
LOUISVILLE, KY.—Butcliffe & Co.  
MEMPHIS, TENN.—White & Williams.  
MILWAUKEE, WIS.—Oldsmobile Co.  
MINNEAPOLIS, MINN.—A. F. Chase & Co.  
NASHVILLE, TENN.—John W. Chester Co.  
NEWARK, N. J.—Autovehicle Co.  
NEW ORLEANS, LA.—Abbott Cycle Co.  
NEW YORK CITY, N. Y.—Oldsmobile Co.  
OMAHA, NEB.—Olds Gas Engine Works.  
PASADENA, CAL.—Ed. R. Braley.  
PATERSON, N. J.—F. W. Stockbridge.  
PHILADELPHIA, PA.—Oldsmobile Co. of Philadelphia.  
PITTSBURG, PA.—Banker Bros. Co.  
PLAINFIELD, N. J.—F. L. C. Martin Co.  
PORTLAND, ORE.—Merrill Cycle Co.  
POUGHKEEPSIE, N. Y.—John Van Benschoten.  
RALEIGH, N. C.—Raleigh Iron Works.  
ROCHESTER, N. Y.—Rochester Automobile Co.  
SAGINAW, MICH.—A. W. Norris.  
SAN FRANCISCO, CAL.—Pioneer Auto Co.  
SAVANNAH, GA.—T. A. Bryson.  
ST. LOUIS, MO.—Mississippi Valley Automobile Co.  
ST. LOUIS, MO.—McAlister, I. T.—McIntyre & De Long Motor Car Co.  
SYRACUSE, N. Y.—Syracuse Auto Co.  
TEXARKANA, ARK.—Texarkana Auto & Repairing Co.  
TUCSON, ARIZ.—F. Ronstadt.  
UTICA, N. Y.—C. H. Childs & Co.  
WASHINGTON, D. C.—National Capital Auto Co.  
HAWAIIAN ISLANDS—R. H. Halstead, Honolulu.

### FOREIGN LIST OF AGENCIES.

GREAT BRITAIN & IRELAND—Charles Jarrott & Letts, Ltd., 45 Great Marlboro St., London, England.  
GERMANY—(All Germany except Cologne)—Earnest Weigertner, Berlin; Cologne, L. Walter & Co.  
FRANCE—Eugene Merville, Paris.  
SWITZERLAND—Automobile Fabrik Orion AG., Zurich.  
ITALY—Victor Croizat, Turin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
RUSSIA—Th. Thansky & Co.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingley & Co., Johannesburg and New York.  
NEW SOUTH WALES—Knowles Auto. & Power Co., Sydney.  
VICTORIA—Hall & Warden, Melbourne.  
QUEENSLAND—James Smith & Sons, Brisbane.  
SO. AUSTRALIA—Duncan & Fraser, Adelaide.  
WEST AUSTRALIA—American Motor Car & Vehicle Co., Fremantle.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
JAPAN—Bruhl Bros., Yokohama and New York.  
ASIA—MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

WRITE FOR INFORMATION AND ILLUSTRATED BOOK TO

**OLDS MOTOR WORKS,** 1332 Jefferson Ave., **Detroit, Mich.**

Members of the Association Licensed Automobile Manufacturers.



# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, September 10, 1903.

No. 24

## RACINE PLANTS UNITED

**Wisconsin Wheel Works and Pierce Engine Co.  
Consolidate—New Touring Model.**

The Wisconsin Wheels Works, makers of the Wisconsin automobile and the Mitchell motor bicycle, and the Pierce Engine Co., both of Racine, Wis., have been consolidated under the name of the Mitchell-Pierce Motor Co., with headquarters at Racine. The Pierce Engine Co. has been making the motors for the Western Wheel Works. The officers of the new company will be W. T. Lewis, president; A. J. Pierce, vice-president and superintendent, and W. Mitchell Lewis, treasurer and manager. The new company will offer next year a new model touring car, in addition to their Wisconsin runabout. The new car will have a three cylinder, air cooled engine of 15 horsepower. Its weight will be 2,480 pounds, and its selling price \$2,500. A distinctive feature will be the cooling of the cylinder heads by means of a blower, from which separate pipes will lead to the cylinder heads near the exhaust valve.

Mr. W. Mitchell Lewis was in New York City on Tuesday and Wednesday, and he had a couple of conferences with George H. Day, general manager of the Association of Licensed Automobile Manufacturers, and the report went out that he had taken out a license under the Selden patent and joined the association.

## Shelby Files Schedule.

The Shelby Automobile Co., Shelby, Ohio, which recently went into the hands of a receiver, has filed a schedule of assets and liabilities in the United States Court at Cleveland.

The schedule shows unsecured claims to the amount of \$59,964.03, and notes and bills due \$17,383.30. The total indebtedness is \$84,476.05. The total assets amount to \$43,449.51, consisting of real estate, \$3,378.74; bills, promissory notes and securities, \$1,650; stock in trade, \$17,210.83; machinery, tools, etc., \$10,693.70, and debts due on open accounts, \$10,401.27.

Receiver J. C. Fish is still at work en-

deavoring to straighten out the tangled affairs of the company. Many of the former employes are still in Shelby, expecting the works to start up again, but they are beginning to lose hope of this, and some of them are seeking employment elsewhere.

## New Price on Diamond Chains.

On September 1 all quotations on automobile chains and parts were withdrawn by the Diamond chain factory of the Federal Mfg. Co. A list of revised quotations was sent out at the same time.

Hereafter all roller chains will be furnished with rivet side bars 25 per cent thicker than formerly; rivet holes will be reamed to size and edges not polished. The capacity of the plant has been increased 300 per cent, consequently orders will be delivered promptly.

## Dubuque is Courtied.

Mayor Berg of Dubuque, Iowa, has received a letter from the Kamman Automobile Co., Chicago, in reference to removing to Dubuque. It asks if a factory site would be given should it be decided to make the change. The letter states that the concern will invest \$100,000, and adds that it does not ask for any stock subscriptions.

## Waltham Air Cooled Car.

What has been a trade secret for some time is now public property. The Waltham Mfg. Co. are preparing to place on the market a new four cylinder, air cooled touring car with bevel gear transmission. The price will be in the neighborhood of \$1,500.

## Boston Office for Crest.

The Crest Mfg. Co., Cambridge, Mass., has opened an office at 182 Columbus avenue, Boston. R. B. Coburn will have charge of the sales department.

## Friedman Co. no More.

The Friedman Automobile Co., of Chicago, has made a change of name, and is to be known hereafter as the Ideal Motor Vehicle Co.

## Sandusky Opens in Cleveland.

A salesroom at the corner of the Boulevard and Erie street, Cleveland, O., has been opened by the Sandusky Automobile Co. F. X. Frantz is in charge.

## LICENSEES AND AGENTS

**Pressure on Dealers Begun—Some Uneasy,  
Others Laugh—Coups Planned for Show.**

Talk concerning the outlook for 1904 in connection with the policy of the Association of Licensed Automobile Manufacturers now is rife because the effects of the menace promised by the licensed pool are now beginning to show. The plan to work upon the agents and reach the unlicensed makers through them is beginning to show. A number of agents in discussing contracts for next year have been told that they would have to agree not to handle any independent lines before they could get the agency of a licensed make.

How deeply impressed the dealers are, as a rule, throughout the country it is hard to say. Some agents in New York are confessing to feelings of uneasiness, but others seem to be merely amused by the scare.

A man who was prominent in the bicycle industry years ago, and is now disregarding all warnings of the Licensed Manufacturers, said:

"It is altogether funny to think of any one getting alarmed over the matter. It is all a very old chestnut to those in the bicycle business. We went through it several times. There was Pope, with his Lallement fundamental patent, that Jeffery finally busted. There was the Tillinghast tire patent. They advertised threatening every one who used an unlicensed tire, but no one ever heard of users and dealers being scared, nor of any factory ever being closed by injunction. That was under a patent that had been sustained, too, and not an unfought one like the Selden. Again, there is the bottom bracket patent, acquiesced to by Pope and bought by the American Bicycle Co. That case is just about a parallel to the Selden patent. The bottom bracket patent never was fought to a finish, but Pope bought it in and then demanded royalty all around. They demanded \$1 on a bicycle, and were told to go to. Then 50 cents was demanded, and that was not paid. The threat of the bottom bracket fundamental patent has been

hanging over the bicycle trade for five or six years, and it has not yet been fought to a finish and the patent sustained. The case is still pending in the courts, and the patent will expire in about two years.

"What is customary in cases such as this and talk of prosecution is for the independent makers to guarantee protection to their patrons and go along. That is what Gormully & Jeffery did when the Clincher tire people came here from England with a patent that had been sustained by the House of Lords. They sued a retailer, but Gormully & Jeffery defended the suit and won out.

#### "WHY DON'T THEY SUE?"

"What I want to know is, why don't the Licensed Manufacturers make good their bluff and sue some one? It will be time enough for the trade to swallow the scare they are putting out when they begin to do something. It is all press work as yet."

Some dealers are taking the situation seriously, however.

One of the largest retailers in the city, and one who is agent for one of the largest, if not the largest, independent manufacturer, was asked point blank what he was going to do about renewing his contract with that independent maker. He answered: "I do not know as yet. We have not decided either to handle his line next year or not to handle it. It seems to me, though, as far as I can see ahead, that any dealer who handles a line of big cars and wants to deal also in a line of small cars will have to take on the runabout of a licensed manufacturer. His contract with the licensed maker will compel him to do that. The agents will have no choice but to handle licensed cars exclusively. Of course, there will be ways of getting around it, the same as there is about maintaining prices and about other exclusive agency deals, but a firm like this one, or any reputable dealer, will hardly care to stoop to tricks when he has a good field to select from without doing so."

"Have you had any experience with customers afraid to buy a car of unlicensed make?"

"We have not had that experience as yet; but, candidly, I would expect to if I go on selling unlicensed lines. I should say that 99 buyers out of 1,000 have not even heard of the Licensed Manufacturers, but will hear of it if the association continues to advertise as it has been doing. One could get a car all right this year, but next year I expect it will be different."

Another man, and one who knows whereof he speaks, said:

#### A COUP AT THE SHOW.

"After the show the situation will be different. Then the real sway of the licensed makers will begin. Wait until you see what happens at the show in New York. Every licensed manufacturer will have the fact that he is licensed prominently displayed at his stand. The dangers of dealing in and buying unlicensed makes will be abundantly

set forth, and the public generally will understand just what is doing. There will be no one in ignorance of the situation after the show. I imagine that it would be better for the independents if they were not in the show at all. The fact that they are not licensed will be brought out plainly by the display scheme of the licensed makers. The public is more sensitive about such matters than you may think. Men will not take a chance of being annoyed and put to expense, even if they consider the chance of their being prosecuted a remote one, so long as they can avoid the chance and still have a wide range of selection.

#### MAKERS UNDER THE THUMB.

The show will be very much a show of licensed makers, and agents will be in a hurry to get into line, because every member of the association is bound to make his agents subscribe to the ironclad agreement to handle only licensed goods. A dealer will not be able to get an agency for any big car without signing an agreement. A man who wants to handle any independent line will have to stay beyond the pale, and handle only the unlicensed makes. If any manufacturer does not compel his agents to subscribe to the exclusive contract he breaks his contract under his license, and can be quickly stopped from manufacturing by injunction while yet paying his license fee. It is a case of letting no man escape. Every member voted for the exclusive agency contract at Niagara Falls, and in the spring the plan will be seen in full bloom."

#### EXCLUSIVE CONTRACTS ALREADY.

It is a fact that already dealers seeking the agency of licensed cars are being required to sign a contract in which is embodied the following:

"In consideration of the fact that the party of the first part has obtained a license under Selden Patent No. 549,160, and is paying substantial royalty thereunder, and has agreed as a consideration of said license not to contest said patent, directly or indirectly, or aid others in so doing.

"Now, therefore, the party of the second part, in consideration of being appointed an agent for the sale and disposition of the automobiles manufactured by the party of the first part, agrees that during the continuance of such agency he will not infringe said patent, nor sell, keep on hand or dispose of, directly or indirectly, any automobiles containing the inventions claimed in said Patent No. 549,160, not duly licensed under said patent."

That is the form as adopted by the convention of the Licensed Manufacturers at Niagara Falls August 18-19. The resolution under which the form was adopted, as may be remembered, was a sweeping one, reading:

"Resolved, That all the members of this association from now on embody the following clauses in all contracts made by them with agents for the sale of their product, and in any and all arrangements, either verbal

or written, in regard to the sale of vehicles, they conform in full with the spirit as well as the letter of these articles."

Under the articles of agreement signed in connection with the grant of license, all the members must conform to all such rules adopted by the licensees. It is stated by the A. L. A. M. that all members sign to adhere by any rule that the association may adopt in the future. It is this peculiar absoluteness that throws light on the remark of T. B. Jeffery, quoted in the Motor World last week, to the effect that it is not what it costs to get a license, but what it costs to get rid of it when the time comes that one desires to get rid of it, that is most objectionable.

The fact that dealers are already being required to sign this exclusive agency contract indicates that the Licensed Manufacturers are in earnest and that the lines are being tightened.

#### RESTRAINT OF TRADE DODGED.

The question of how far the Licensed Manufacturers can go in their restrictive policy without transgressing the laws against monopoly and "restraint of trade" is one that has been brought up often. It is broadly answered by the old saying that there is no monopoly so great as that given by a patent and that is legalized. The A. L. A. M. has the counsel of several of the most eminent patent lawyers in the country, and is aiming to keep well within the bounds of patent licensees. The association is making no contracts and no stipulations. It is not an incorporated body, and is not dictating to the trade in any way. Only the Electric Vehicle Co. dictates its terms to its licensees, and they must comply. It is interesting to note that in the legal warnings sent out the phrase "Our clients, the Electric Vehicle Co., a member of the Association of Licensed Automobile Manufacturers, direct," etc. Never by any chance does it read that the A. L. A. M. direct. The individual man-

#### COULD DICTATE PRICES.

ufacturers deal with the agents, and every point of "restraint of trade" in any illegal manner is avoided. According to an official of the licensed association: "Under the patent laws the Selden licensees could go much further than they have done—could, in fact, dictate the price of vehicles to be made by each licensee by dictating its size and style, or even the price, directly. The Electric Vehicle Co. could say to the Olds company, 'You make a five-horsepower car, to sell at \$600, and no other,' and to the Winton company it could say, 'You make a twenty-horsepower car, to sell at \$1,500, and no other,' and so on." The extent to which the patent laws permit licensors to go in making terms with licensees is set forth in a pamphlet containing a number of court decisions, some from the Supreme Bench of the United States, and this pamphlet is now being circulated among the Selden licensees. It consists of four pages from the Federal Reporter, and the case quoted is one of the

## MUST PAY COMMISSION

### Agents Entitled to It Even When Manufacturer Fails to Make Delivery.

An important decision, bearing on the right of an agent to the commission on an automobile sold by him but not delivered, owing to the failure of the manufacturer to so deliver, has been handed down by the Third Appellate Division of this State. The Court holds that such agent is entitled to his commission in spite of the non-delivery.

The case came up in a suit brought by R. De Witt Veeder against A. J. Seaton, a Utica (N. Y.) dealer. The Court held that an agent employed to sell automobiles on commission, who effects a sale of a machine to a responsible party for the price stipulated by his principal, upon terms satisfactory to the latter, is, in the event of the refusal of the automobile manufacturer to perform the contract of sale by delivering the machine and accepting the purchase price, entitled to receive his commission. The Court also held that the fact that the purchaser might have taken advantage of the absence of a written contract, which was required by the Statute of Frauds, "did not prevent the agent from earning his commission when he effected a sale to a responsible party at the stipulated price, or terms waived, and accepted by the defendant."

The Court points to the fact that "a contract for the sale of real estate to be binding must be in writing, but an agent who has been authorized to make a sale at a certain price earns his commission when he has procured a purchaser ready and willing to purchase at the terms fixed, with whom the vendor refuses to contract or to whom he refuses to convey upon payment."

### 1904 Four-Cylinder Year.

In casting about to judge what will be the characteristic changes in American-made cars for 1904 it is found that the tendency is still setting toward the adoption of European patterns and methods. The foreign ideas will be pursued further than ever in the 1904 models. Larger and more powerful cars will be the rule, with the hooded engine in front, honeycomb radiators, and more capacious and luxurious tonneaus.

The one thing above all others that impresses one is the almost unexceptional movement toward the introduction of four cylinder engines in touring cars. Nearly every concern that has hitherto made a one, two or three cylinder touring car will next year present one with four cylinders, and a number of makers who have not heretofore turned out a touring car will next year offer such a model with a four cylinder engine. The four cylinder touring car can even now be predicted to be the main type of American car for 1904.

## Recent Incorporations.

New York, N. Y.—Ernest J. Willis Company, under New York laws, with \$75,000 capital, to deal in automobiles and electric and other vehicles. Directors—Ernest J. Willis and Carlisle M. Willis, Manhattan, and William W. Myers, Brooklyn, N. Y.

Hartford, Conn.—The Columbia Motor Vehicle Co., with \$2,000 capital, to manufacture and deal in motor vehicles of every kind and description, and to acquire and hold stocks, shares and debentures of other corporations. Incorporators—Lucius F. Robinson, A. B. Wilson and M. Toscan Bennett, all of Hartford.

## Dates for Detroit Show.

Five months in advance, the managers of the Detroit automobile show announce the dates for their third annual. It will be held from February 15 to 20, inclusive, these dates being immediately following those of the Chicago show.

The great growth of Detroit as a manufacturing as well as a retail centre assures the show being a greater success than ever. In anticipation of an increased demand for space the galleries, which last year were occupied by a bench show, will be planked over and the additional space thus obtained utilized for the display of automobile sundries.

## Russell Goes With Locomobile.

E. F. Russell, formerly superintendent of the Electric Vehicle Co., has become connected with the Locomobile Co. of America in a similar capacity, succeeding Superintendent Janney. The move is in direct line with the declared policy of the Locomobile Co., and is the forerunner of an advance all along the line, designed to strengthen the company's forces. The factory at Bridgeport is still working a night shift in the endeavor to catch up with its orders. Nothing but praise is heard regarding the four-cylinder gasoline car, all who have tried it being delighted with it.

## Changed Name to Lafayette.

In view of the fact that there is a concern in Indianapolis with a similar name, the recently organized Mohawk Automobile Co., Detroit, Mich., decided to change its name. It is now called the Lafayette Automobile Co.

## Elects Old Officers.

On Tuesday of this week the annual meeting of the Board of Directors of the Electric Vehicle Co. was held in this city. The old officers were re-elected, headed by President M. J. Budlong.

## Hall to Sell Solars.

Hereafter Charles Hall will represent the Badger Brass Mfg. Co. in the sale of its well-known Solar lamp. His territory will be between Buffalo and Denver.

## MIDSUMMER ADVERTISING

### Its Tells When the Fall Trade Begins, Says Manager Bunting of Wanamaker's.

The virtue of following the policy of advertising extensively in midsummer, which is not generally believed in, is being exemplified right now by the sales of Searchmonts and Ramblers by John Wanamaker. All during the so-called "heated term," which somehow missed fire this year, Searchmonts and Ramblers were advertised strenuously in the magazines and newspapers, and now the reward is coming in the form of an unusually early and brisk fall trade.

"How is business?" The question was asked of J. S. Bunting, manager of the Wanamaker automobile department, while he was in New York last week, by a Motor World representative. The reply came:

"First rate. Trade is surprisingly good. I never saw such a thing as the way business has picked up during the last two weeks. There are five Searchmont cars out on the sidewalk going to be delivered, and all were sold within the last week. We have been selling Ramblers at the same rate, too."

"How do you account for such an early beginning of the fall business? Others do not seem to be enjoying the blessing."

"Well, the only thing I can attribute it to is the advertising we did during the summer and the outside work by our salesmen. While men are away and the stock market is quiet they have more time to notice advertisements, and with their minds relaxed from business the advertisements make more impression on them. We kept talking Searchmont and Rambler into them, and at any rate have made the names known to many who did not know about them before. I believe, too, that many, reading the 'ads,' determined to have a look at the machines before buying elsewhere, and in consequence we have caught a lot of business from persons who came here as soon as they returned to town. They came in response to our 'ads' to have a look at us. We saw them before any one else did, and we sold them. Then, again, our salesmen were not idle during the summer. Instead of sitting still during the dull season, waiting for trade to come, they went out after the business. They hunted up men in their offices and sold to them."

## French Makers in Barcelona.

The imports to Barcelona under the heading of "sewing machines, motor cars and bicycles," increased from 305 tons in 1901 to 982 tons in 1902, and commenting on this the British Consul General at that point says: "The increase is entirely due to the number of French motor cars which during the last two years have been imported. This is not likely to become a big trade, as the roads are not kept in good condition."

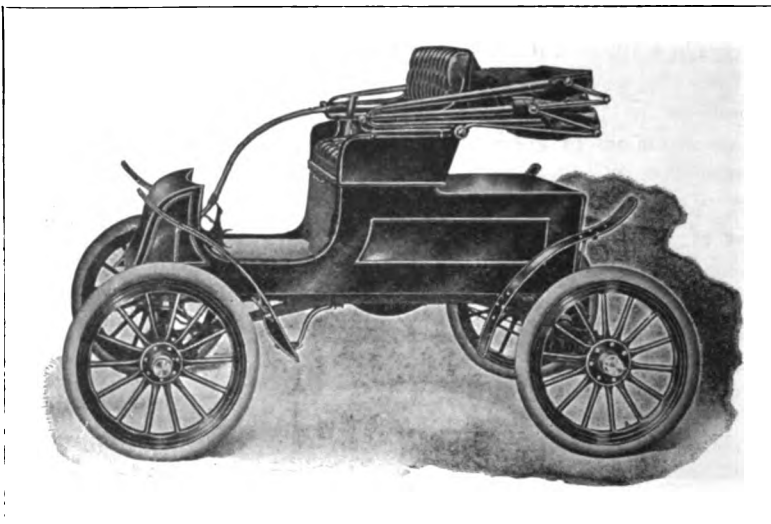
# The Possession of a NORTHERN is a Sign of Good Judgment.

**T**HE man who owns a NORTHERN constantly proves the wisdom of his selection. The sturdy NORTHERN responds to every demand made upon it and gives its purchaser the maximum of automobile pleasure with the minimum of trouble and expense.

The NORTHERN is the choice of discriminating buyers everywhere.

Agents who would handle a car that yields profit to themselves and gives satisfaction to consumers are invited to write now.

PROMPT DELIVERIES.



**NORTHERN MFG. COMPANY, - Detroit, Michigan.**

# FISK TIRES

**Single Tube and Detachable.**

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**MADE RIGHT**

**RUN RIGHT**

**ALL RIGHT**

**FISK RUBBER COMPANY, -**

**Chicopee Falls, Mass.**

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604 Atlantic Ave.

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PHILADELPHIA,  
916 Arch St.

CHICAGO,  
52 State St.

SYRACUSE,  
423 So. Clinton St.

BUFFALO,  
28 W. Genesee St.

DETROIT,  
254 Jefferson Ave.

SAN FRANCISCO,  
114 Second St.



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Those who are interested in motor vehicles will find the facilities and information of our office always at their command.

To Facilitate Matters Our Patrons Should  
 Address us at P. O. Box 649.

CABLE ADDRESS, "MOTORWORLD," NEW YORK

Entered as second-class matter at the New York, N. Y., Post Office, November, 1900.

NEW YORK, SEPTEMBER 10, 1903.

### Cooling Methods.

As we stated in these columns nearly a year ago, air cooling for gasoline motors is a subject that must receive increasing attention. The time is long past when it can be dismissed with pooh-poohs, for air cooling has gone far beyond the academic stage and become a cold, concrete fact. Cars with air cooled motors—whether with or without fan assistance—have conclusively demonstrated their practicability, and to-day stand as object lessons. As far as the smaller cars are concerned, water cooling is not essential, however desirable or advantageous it may be.

The approach of the winter season is certain to again invest the subject with increased importance. During the warm weather the faulty working of pumps, the insufficient circulation of water, the bending or breaking or clogging of water pipes, are the chief troubles encountered in connection with water cooling systems. But

when the mercury begins to seek the bulb of the thermometer, and water freezes unless kept in constant circulation or protected by artificial warmth, then the patient user begins to wonder if he cannot find relief from the ills that irk him.

His attention is easily and naturally turned in the direction of air cooled motors. They solve the problem, and if they do not bring in their train disadvantages they will undoubtedly give the much desired relief. Are there such attendant disadvantages? Apparently not; at least as far as the lighter class of cars is concerned; and, as a matter of fact, these are the only ones in question.

It is not to be wondered at that makers are giving the subject serious consideration. If the next season does not witness a number of new air cooled cars it will occasion no little surprise.

### Limiting the Speed.

On more than one occasion the suggestion has been made that no automobile capable of exceeding the maximum legal rate of speed should be permitted on the public roads. The proposal is, of course, too preposterous to receive serious consideration. But a step in this direction has been taken by a London retail firm, which has ordered a lot of cars to be geared so that they can never be driven at more than twenty miles an hour—the limit fixed by the new British motor law.

This move is one that can be viewed in several widely differing aspects. On its face it has merit, as far as this particular case is concerned, for the car is of the runabout type, and a twenty-mile speed is not greatly below its normal rate. To gear it so that it can never go faster than this does not, therefore, materially affect it.

But when it comes to larger and more powerful cars the matter is not such a simple one. Particularly is this the case if we assume that the speed reduction will be affected by means of gearing. In such case there is no crippling of the power plant; that remains unchanged. But when it is remembered that the power is, or can be, utilized, as usual, but is virtually wasted in transmission, the matter assumes a much more serious aspect. As it is now, speed reductions can be made through changes of gears. But it is not always so done. In fact, skilful operators change speeds as little as possible, and the practice frequently is—especially with high powered cars—to make

use of the low or intermediate speeds only at starting or upon encountering hills of unusual steepness. Throttle governing has become the accepted method of control, and throttle governing is, of course, entirely out of the question as a means of limiting speed in the manner referred to.

No automobile intended for everyday road use is overpowered in the sense that its full power is never called on. Occasions always arise when the maximum power is needed, and the smaller the car the more frequent are the demands of this character. Clearly, therefore, it is of vital importance that it can be called upon, hence a speed limitation through gearing is the only one possible, and the same reasons that have caused speed changes through gears to become unfashionable would inevitably cause them to become objectionable if they were to become enforced.

### Against Special Legislation.

War against the scorcher can be effectively waged without placing all motorists indiscriminately in the category of suspects. This is something which the average lawmaker cannot seem to comprehend. The rebellion of motorists against the legislation which stigmatizes them as an especially dangerous class is not a kick against the enactment of laws which shall conduce to the safety and comfort of all persons making use of public highways; it is a protest against laws that are not general in their application.

Let the legislation which is intended to conserve the safety of streets and highways be made general, as it can easily be made, and the average automobilist will be as eager to sustain it as any other citizen. It must be reasonable as well as general, however, dealing with the speed question, for instance, with common sense consideration of conditions of safety, regardless of stop watches and measured distances.

Every now and then some newspaper editorial suggests that the manufacturers and users of automobiles should co-operate to remove popular prejudice. It is up to such newspapers to assist in the matter by ceasing to make the scorcher representative of the class against which this prejudice exists. If it be true, as one newspaper has suggested, that the automobile age brings us in danger of reversion to that mode of touring which Stevenson describes in his "Travels with a Donkey in the Cevennes," the world is in danger of losing much more than the automobile. The same paper suggests that while the donkey is not the swiftest of motors, he



laymen will ejaculate, oblivious of the fact that a similar occurrence where a horse drawn vehicle is concerned would have been dismissed without adverse comment.

When brakes do go wrong the value of a sprag is most apparent. It is a sort of an extra emergency brake, simple, always ready, and a certain means of stopping if made strong enough and dropped in time. It should be ever ready; the operator should have the cord or other actuating device at hand and know that it is in working order. Some careful drivers even go so far as to contend that the sprag should be dropped whenever an especially dangerous hill is reached. Trailing on the ground, it does no harm, while if the car should start to go backward the bar "bites" instantly and brings it to a stop. This may be excess of caution, but it is sometimes better than lack of it.

That so few automobile accidents, comparatively, occur is merely proof of skilful designing, sound construction and careful usage. The three make for safety. The absence of any one, any break in the chain, invites disaster. Good fortune may ward it off for a time, but it cannot be dodged indefinitely.

### A Needed Reform.

There is cause for much satisfaction in the determined and comprehensive fashion with which the tire manufacturers have grappled with that eternal problem of modern vehicles—tire troubles. It would appear that what can be done at the present stage in the development of pneumatic tires to ameliorate the difficulties of their use, the manufacturers intend to do and will accomplish through the excellent rules agreed upon.

Until some satisfactory substitute for rubber has been found, or some process of handling it is discovered whereby its excessive vulnerability can be decreased, the most that can be done is to attain the greatest possible durability by the employment of the best material and workmanship, and then seeing to it that the tires are properly fitted to perfect rims and used with due regard to the proportion between the weight of the tire and its load.

Some plan by which the minute attention to details necessary to have tires and rims fit perfectly could be insured has long been needed. So, also, has some way to compel the vehicle manufacturers to equip their product with tires heavy enough for the stress imposed upon them.

It has been abundantly shown that tire manufacturers can make tires to order to meet any upshot price a builder of automobiles may name. It is unfortunate that this has been demonstrated to so great an extent. The chief result of it has been to discourage the great comfort-loving public from the use of pneumatic tires. It will be better for the tire manufacturer to refuse to let the vehicle maker dictate the price of tires and then arrange the quality to suit the price. The purpose of the tire trade, it is understood from this new move, is to henceforth determine for itself the grade of goods it will offer and the prices for them. Bearing the maker's guarantee in mind, it is obvious that this is the better way. The natural tendency with a guaranteed article is toward improvement of its durability.

Ever since the invention of the pneumatic tire its inequable liability to puncture, and its unvarying susceptibility to wear, have repeatedly caused the unfortunate among its users to question whether its superior resiliency, with the consequent comfort and speed, fully compensated for the troubles, expense and worry incident to its tenderness and lack of marrow. Since its use became widespread, the troubles of punctures, bursting and rapid outwear have been perpetual problems confronting the makers and users of all classes of vehicles that are fitted with the pneumatic. With bicycles, automobiles and the road wagons of horsemen, the tires have become recognized as the most expensive, least lasting and most treacherous part of the vehicle. So keenly has the fact been driven home that the prosperity of the automobile business, and that of the other industries mentioned, has been not only menaced, but actually injured by the dread of tire troubles and expense, because it has led to persons withholding from purchase. It is beyond dispute that men and women have abandoned the sport of automobiling and of bicycling for no other reason than because the annoyance of tire troubles and the expense of keeping their vehicles properly tired marred their enjoyment.

This being all true, the eternal tire question is without qualification the most serious one before the automobile trade, and it should unhesitatingly be so regarded.

Whatever move is made, therefore, that makes toward the deriving of longer and more satisfactory service from tires should receive encouragement from all concerned. The user, having learned that the tires are

the most troublesome and expensive part of a motor car, he should be educated thoroughly to the axiom that "the best is the cheapest," which applies in this case with such peculiar force. It is understood that the tire makers contemplate the prosecution of a campaign of education with the users, and they have excellent opportunity for it when the time for refitting comes around. This, too, is well.

A goodly proportion of the buyers of automobiles now realize the folly of cheap tires, of light tires on heavy cars and the evils of tires imperfectly fitted to the rims. In the majority of cases it will not be difficult for the manufacturer to fit his machines with the size and quality of tires best suited to the weight of the car and to get from the purchaser the extra cost of supplying the most durable. The users, as a whole, are more anxious to see the vexing problem solved than any one, and are willing to pay for what is most durable. For the good of all, the exceptions among users who do not feel this way should be educated to a realization of the facts.

The condition is one that should be faced frankly, and this the tire makers have done. Until something better can be found, the weaknesses of the pneumatic tire must be openly conceded and the problem grasped with a courageous determination to do the best possible under the circumstances. By bulwarking the weaknesses with every possible precaution against malfit and overburdening, a wise and effective step has been taken. It expresses a belief that prospective prosperity should not be obscured by considerations of present profit.

It has scarcely needed this season's experience to make it clear that the decadent days of the club run are upon us. The glory and glamour of the gorgeous gatherings of the past have been pretty effectually dissipated; the delusion that participation in a run of dozens of cars, proceeding in single file at a monotonous pace, each succeeding car more completely enveloped in dust than its predecessor, is pleasurable motoring entirely dispelled. A few experiences of the sort usually sufficed.

There are indications that next year the cardan joint and live rear axle system of transmission gear will make even greater advances than ever. For all but the very largest cars its advantages have become manifest, and it is pretty well assured that it has come to stay.

## SINCHOLLE BEATS LA ROCHE

### A Series of Interesting Automobile Race at the State Fair in Syracuse.

Automobile races as the attraction for the closing day of the State Fair at Syracuse, N. Y., on Saturday last drew fully 11,000 spectators, and the sport was such as to



A CLOSE CONTEST FOR THE LEAD.

afford much satisfaction in spite of the fact that Barney Oldfield, who was to have been present, did not appear, the recent accident at Detroit having made it necessary to cancel the date. Henri Page also was on the original list of experts who were to show speed on the track, but the Parisian had the same reason as Oldfield for his absence.

The race between La Roche and Sincholle, each driving a Darracq, was originally planned as a triangular match, with Henri Page as the other contender, but Page's absence reduced it to the character of a duel. The cars were of 40 horsepower, both built in France to take part in the Paris-Madrid race.

The event was in five-mile heats, best two in three. From a flying start Sincholle went away a trifle behind La Roche, but before the end of the first mile was reached the former was leading and was steadily gaining on the New York man. Miles in a few seconds more than a minute were reeled off and the speed of the contestants aroused the wonder of and excited the throng.

After winning the first heat in 5:15 2-5, Sincholle lost the second, an accident to his car making his withdrawal necessary at the end of the fourth mile. The Frenchman came back strong, however, and won the third heat and the \$175 cup handily, his time for the third heat being 5:14 1/2.

The five-mile event for Winton touring cars with tonneau attached was won by Albert E. Petrie with George S. Larrabee's car. H. H. Mundy led for the first three miles, when the oil in his machine became ignited and he was forced to slow down, which allowed Petrie to pass him and win. The victory of the Syracuse boy was a most

popular one, pleasing the spectators immensely.

The ten-mile race for cars weighing under 1,800 pounds was soft sport for Sincholle, La Roche finishing in second place. Wurgis with the little Olds ran a remarkably game race and finished third.

The handicap five-mile race for members of the local club furnished the only real race of the day. John Wilkinson, from scratch, with a Franklin road car, won the

race, passing two contestants on the back stretch of the second mile. R. M. Cornwall in a Franklin, with a handicap of five-sixteenths of a mile, kept the lead to the first turn of the third mile, when Wilkinson passed him and won easily.

The fastest mile of the day was negotiated

Two miles, for motor bicycles, regular stock machines—Won by A. S. Noonan, Rome, N. Y.; W. F. Murphy, New York, second; James B. Woodruff, Syracuse, N. Y., third. Time, 2:45 1-5.

Five miles, for cars under 1,200 pounds—Won by Dan Wurgis (Oldsmobile); John Wilkinson (Franklin), second. Time, 5:49.

Five miles, for Winton touring cars, stock models, with tonneau attached—Won by A. E. Petrie, Syracuse; R. H. Mundy, Utica, second. Time, 9:55.

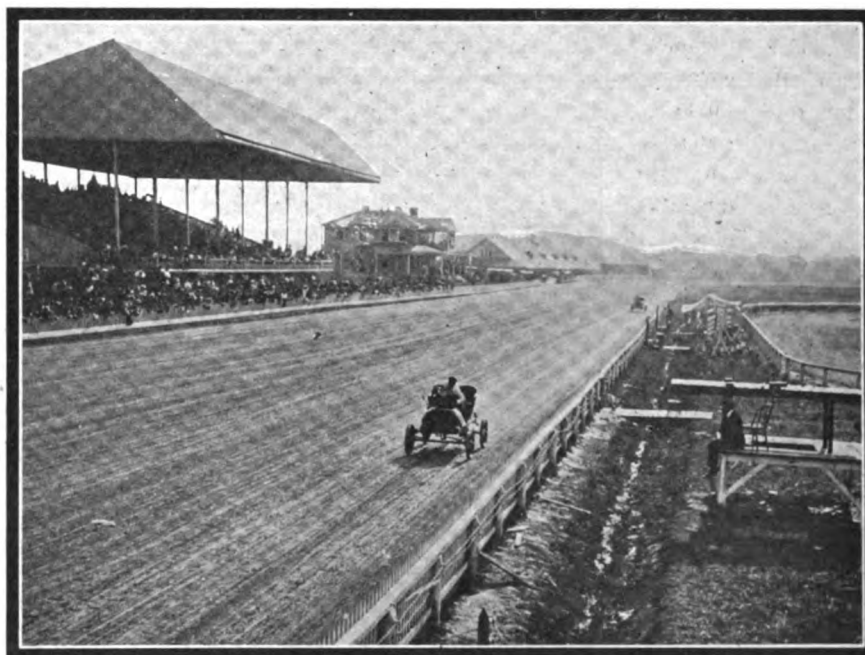
Ten miles, for cars under 1,800 pounds—Won by Jules Sincholle, New York (Darracq); F. A. La Roche, New York (Darracq), second; Dan Wurgis, Cleveland, O. (Oldsmobile), third. Time, 10:36 2-5.

Special match between Jules Sincholle (Darracq) and F. A. La Roche (Darracq); five-mile heats, best two in three. Sincholle won first and third heats, and the race, La Roche winning second heat. Time, first heat, 5:15 2-5; second, 5:48 4-5; third, 5:14 1-5.

Five-mile handicap for members of the Automobile Club of Syracuse—Won by John Wilkinson; E. Petrie (Winton), third. Time, 8:23 1/2.

Five miles, for Franklin cars, regular stock models—Won by R. M. Cornwall; Oscar N. Hyne, second; Forman Wilkinson, third. Time, 9:02 4-5.

One-mile record trials (prize for fastest mile by any car)—Won by F. A. La Roche (Darracq). Time, 1:04 3-5. Prize for fastest mile for car under 1,200 pounds—Won by Dan Wurgis (Oldsmobile); John Wilkinson (Franklin), second. Time, 1:08.



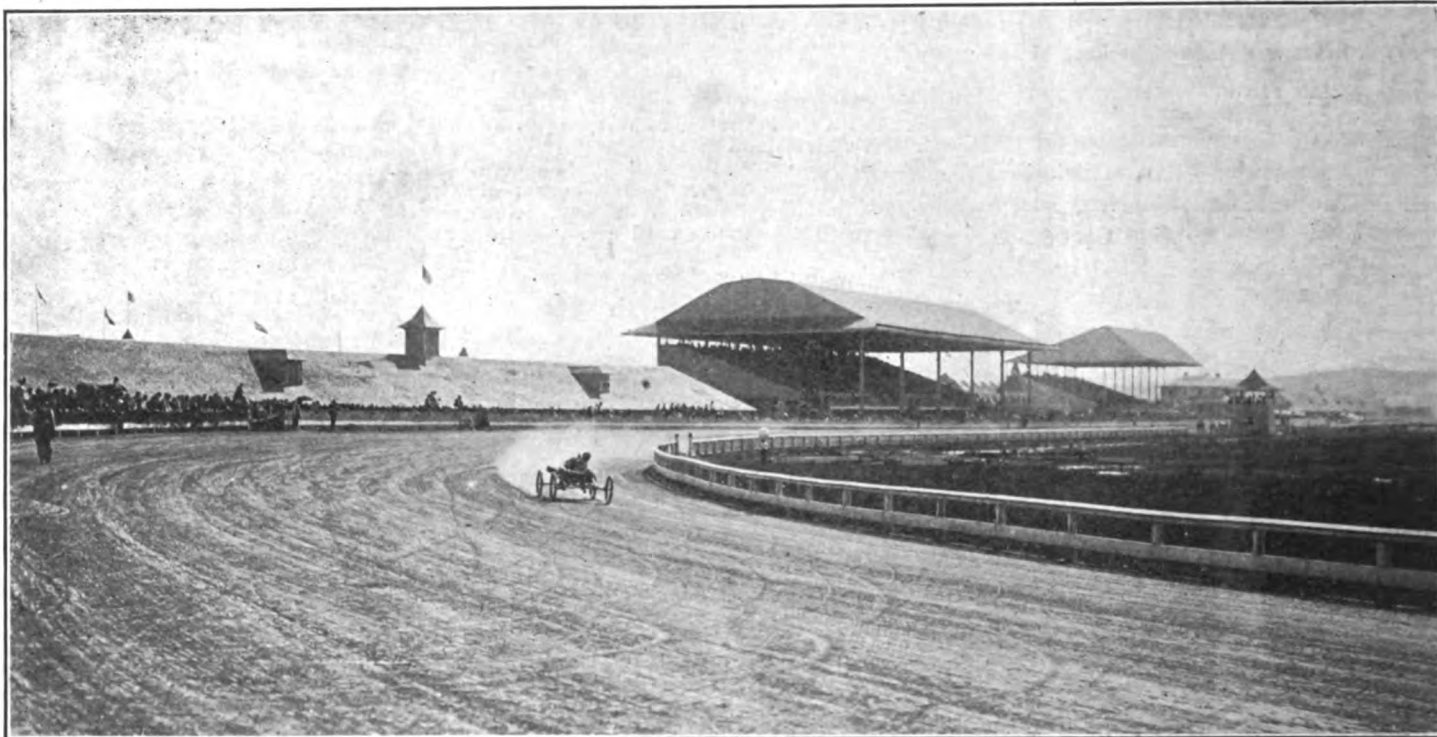
THE 5 MILE HANDICAP; A STERN CHASE.

in exhibition by Sincholle, who turned the ring in 1:00 3-5 early in the afternoon, while the gear of La Roche's machine was being changed.

Following is the summary of the day's events:

The officials of the meeting were as follows:

Referee—A. R. Pardington, chairman Racing Board of the American Automobile Association and chairman Race Committee of the Long Island Automobile Club.



R. M. CORNWALL WINNING THE RACE FOR FRANKLIN CARS.

Judges—William Horace Hotchkiss, president Buffalo Automobile Club; Lee Richmond, president Rochester Automobile Club; Charles M. Page, secretary Albany Automobile Club; Harry H. Mundy, secretary and treasurer Automobile Club of Utica, and George S. Larrabee, second vice-president Automobile Club of Syracuse.

Timers—H. W. Smith, president New York

State Association of Automobile Clubs, first vice-president Automobile Club of Syracuse; Alexander T. Brown, Automobile Club of Syracuse; Charles S. Averill, Syracuse Driving Club; Willis B. Burns, Syracuse Driving Club, and John A. King, Syracuse Driving Club.

Starter—A. J. Picard, New York.

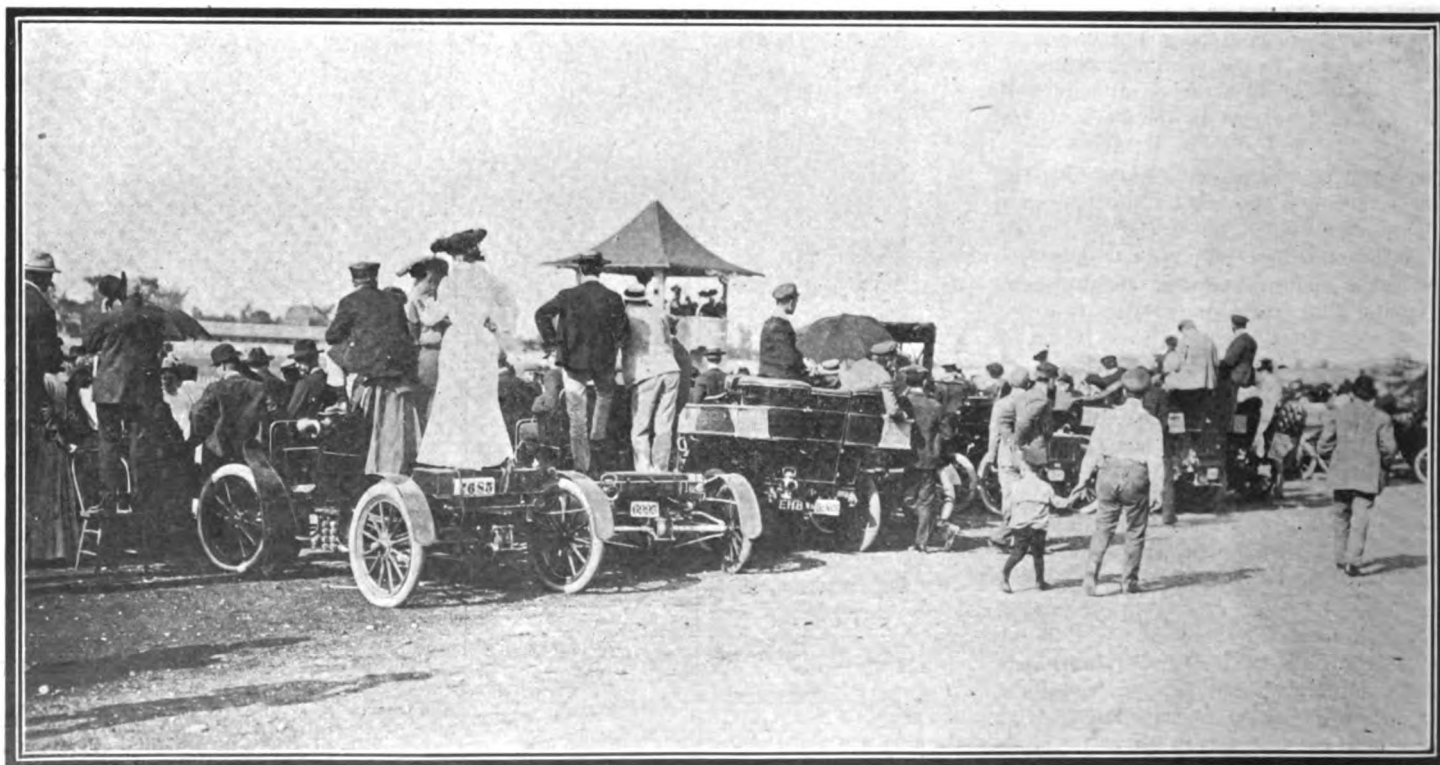
Assistant Starter—T. A. Young, Automobile Club of Syracuse.

Clerk of Course—F. J. Wagner, secretary Buffalo Automobile Club.

Assistant Clerk of Course—W. A. Fancher, Automobile Club of Syracuse.

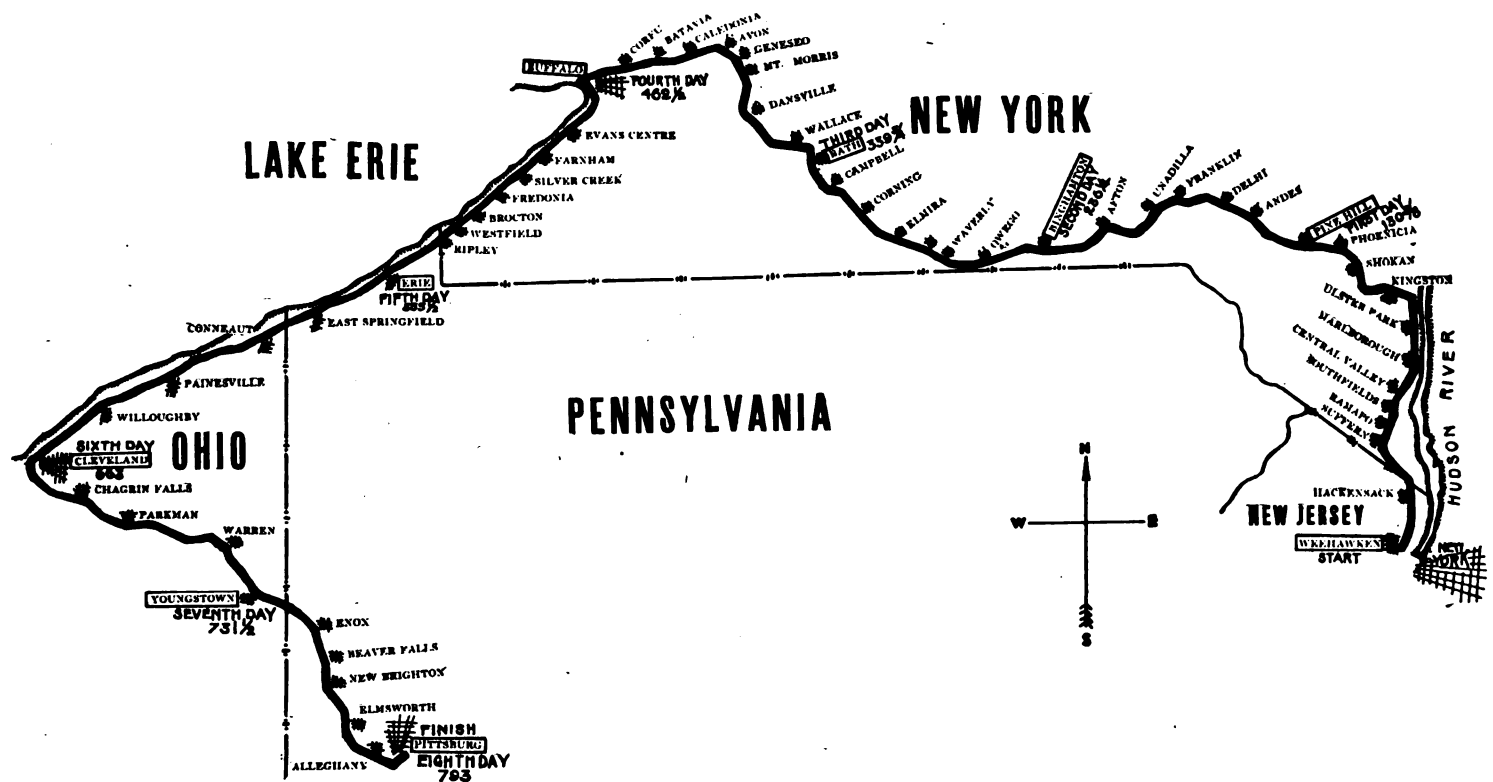
Announcer—Peter Prunty, New York.

Ushers—Henry Walters, Automobile Club of Syracuse; Oscar N. Hine, Automobile Club of Syracuse; Forman Wilkinson, Automobile Club of Syracuse; Carl L. Amos, Automobile Club of Syracuse.



IN THE PARKING QUARTERS; AN INTERESTED GATHERING

## THE COURSE AND THE ITINERARY.



## TUESDAY, OCTOBER 6.

Miles.	Place.	Miles	Place.
15½	Woodcliffe.	64½	Cedar Hill Cemetery.
6¼	Little Ferry.		
8½	Hackensack.	67½	Marlboro.
16½	Ridgewood.	71½	Milton.
18½	Hohokus.	75½	Highland.
19½	Waldwick.	86½	Ulster Park.
21	Allendale.	90½	St. Remy.
25½	Mahwah.	91½	New Salem.
27½	Suffern.	91½	Eddyville.
29	Ramapo.	92½	Wilbur.
30½	Sloatsburg.	100½	Stony Hollow.
33½	Tuxedo.	102	West Hurley.
37½	Southfields.	104½	Olive Branch.
44½	Central Valley.	108½	Shokan.
45½	Highland Mills.	113½	Beechford.
47	Woodbury Sta.	114½	The Corners.
50½	Mountainville.	118½	Phoenicia.
53	Orrs Mills.	123½	Allaben.
54½	Vail Gate.	124½	Shandaken.
57½	West Newburg.	130½	Pine Hill.
58½	Newburg.		

## WEDNESDAY, OCTOBER 7.

Miles	Place.	Miles	Place.
133½	Griffins Corners.	202½	Bainbridge.
134	Fleischmanns.	208½	Afton.
140½	Margaretville.	214½	Nineveh.
144½	Dunraven P. O.	215½	Harversville Village.
152	Andes.		
165½	Delhi.	219½	Belden.
175½	Treadwell P. O.	225½	Sanitaria Spgs.
182½	Franklin.	228½	Port Crane.
187½	E. Sidney P. O.	233½	Port Dickinson.
192½	Unadilla.	236½	Binghamton.

## THURSDAY, OCTOBER 8.

Miles	Place.	Miles	Place.
245½	Union.	292½	Wellsburg.
252½	Campville.	298½	Elmira.
255½	Hiawathe.	303½	West Junction.
259½	Owego.	305½	Horseheads Sta.
265½	Lounseberry.	310½	Big Flats.
268½	Nichols.	313½	E. Corning Sta.
270½	Smithboro Bdge.	316½	Gibson.
273½	Barton.	316½	Corning.
278½	Ellestown.	321½	Painted Post.
279½	East Waverly.	324	Coopers.
281½	Waverly.	328½	Campbell.
285½	Chemung P. O.	333½	Savona.
286½	Chemung Sta.	339½	Bath.

## FRIDAY, OCTOBER 9.

Miles	Place.	Miles	Place.
343½	Kanona.	392½	Geneseo.
348½	Avoca.	401½	Avon.
351½	Wallace.	408½	Caledonia.
356	Cohocton.	415½	Leroy.
363½	Patchins Mills.	425½	Batavia.
365½	Perkinsville.	437½	Corfu.
369½	Dansville.	442	Crittenden.
378½	Kysorville.	445	Mill Grove.
381½	Sonyea, Craig Colony.	451½	Bowmansville.
385½	Mt. Morris.	462½	Buffalo.

## SATURDAY, OCTOBER 10.

Miles	Place.	Miles	Place.
472½	Woodlawn Bch.	519½	Portland.
477½	Wanamah.	526½	Westfield.
481½	Idlewood.	531	Forsythe.
487	Evans Centre.	534½	Ripley.
492½	Farnham.	537½	State Line.

494½	Irving Station.	542½	Northeast.
494½	Irving.	546½	Mooreville.
498	Silver Creek.	549½	Harbor Creek.
504	Sheridan Centre.	553½	Wesleyville.
510	Fredonia.	555½	Erie.
516½	Brocton.		

## MONDAY, OCTOBER 12.

Miles	Place.	Miles	Place.
574½	Miles Grove.	611½	Geneva.
579½	East Springfield.	618½	Madison.
583½	W. Springfield.	629½	Painesville.
587½	East Conneaut.	635½	Mentor.
588	Conneaut.	640½	Willoughby.
596	N. Kingsville.	649	Euclid.
602	Ashtabula.	663	Cleveland.

## TUESDAY, OCTOBER 13.

Miles	Place.	Miles	Place.
682½	Chagrin Falls.	709½	Southing.
690½	Auburn Centre.	716½	Warren.
692½	Auburn Corn'rs.	726	Girard.
696½	Troy.	729½	Brier Hill.
700½	Parkman.	731½	Youngstown.

## WEDNESDAY, OCTOBER 14.

Miles	Place.	Miles	Place.
736½	Poland	771½	Economy.
741½	New Middleton.	773½	Leetsdale.
746	Petersburg.	775½	Sewickley.
747½	Enon.	779½	Glenfield.
751½	Darlington.	781½	Elmsworth.
758½	Beaver Falls.	783½	Avolon.
760½	New Brighton.	786½	Woods Run.
765	Freedom.	786½	Allegheny.
765½	Conway.	793	Hotel Schenley.
768½	Baden.		

## AT THE LOWELL FAIR

### Spindle City has its First Taste of Automobile Racing and Likes it.

Automobile Day was a success at the forty-seventh annual fair of the Middlesex North Agricultural Society, held at Lowell, Mass., last week. Friday was largely given over to the self-driven vehicles. The day opened with a parade on the race-track on the fair grounds. Three abreast, the automobiles circled the track several times, present a fine appearance and eliciting much applause. Among the vehicles in the line were the following:

Morrison Co., electric, Lowell; A. S. Lang, Lawrence; F. S. Bascom, Stanley steam carriage, Lowell; A. W. Lang, Stanley, Lawrence; George H. Runels, Stanley, Lowell; Harry K. Noyes, Lowell; T. E. Bailey, Lowell; A. D. Prince, Lowell; Harry L. Stanley, Lowell; C. Freemont Morse, Lowell; Dr. W. E. Hicks, Knox, Lowell; H. E. Fletcher, Knox, Westford; C. F. Cross, Knox, Lowell; Dr. C. T. Clifford, Knox, Lowell; T. A. Gale, Lowell; A. S. Sargent, locomobile, Lowell; P. Sprague, Knox, Lowell; Ralph Thyng, West Derry, N. H.; H. H. J. Reed, Lowell; A. S. Morrison, Peerless, Boston; L. M. McDermott, Peerless, Boston; Fred S. Bean, Packard, Lowell; A. E. T. White, Boston; W. H. Greene, two machines, Peerless and Pierce; Sawyer Carriage Co., Yale, Lowell; G. H. Wood, Lowell; Allan Parker, Lowell; E. S. Hylan, Lowell; Jeremiah Tradir, Orient buckboard, Lawrence; W. S. Eldridge, Cadillac, Boston, and others.

The races followed immediately after the parade, and all the events were watched with close interest. The summary:

Five-mile race for light steam and gasoline carriages—Won by W. S. Eldridge, Boston (Cadillac); Jeremiah Tradir, Lawrence (Orient buckboard), second; E. C. Bascom, Boston (Stanley), third. Time, 11:04. George H. Wood, Lowell (Stanley), was the other starter.

Exhibition five-mile race between two White cars. Time of winner, 9:52½.

Five-mile motorcycle race—Won by Fred N. Perkins (Indian); A. Batchelder, Lowell (Indian), second; John Morin, Lowell (Orient), third. Time, 10:15. The other starters were John Mehan (Warwick); Welledge Findle, Lowell (Orient); E. N. Emerson, Lowell (Auto-Bi), and Charles C. Mack (Auto-Bi.).

Five-mile race for gasoline touring cars—Won by A. S. Morrison, Boston (Peerless); L. N. McDermott, Boston (Peerless), second; W. E. Eldridge, Boston (Cadillac), third. Time, 11:11. E. S. Hylan, Lowell (Peerless), was the other starter.

Exhibition mile against time by Louis Ross, Newton, Mass. (Stanley). Time, 1:52.

A White steam car was recently sent up a noted hill in Glasgow, Scotland, Scott street hill, and ascended it without a falter. The grade is 1 in 4.

## New Zealand Motorists Form Club.

Motoring is spreading rapidly in New Zealand. At Auckland the active motorists have formed an organization under the name of the Auckland Automobile Association. Already there are forty-three members, most of whom are provided with cars, among which may be counted Darracqs, a Wolseley, Oldsmobiles and Locomobiles. Weekly runs are regularly held, and during the New Zealand summer, which is now approaching, it is intended to organize regular week end excursions. The honorary secretary is Dr. de Clive Lowe, the patron of the society is Sir J. Dogab Campbell, M. D., and the president is Dr. F. Rayner.

## Famous French Races are Run.

Sixty automobiles lined up before the starter on Deauville Beach last Thursday ready for a dash of 500 metres, or about 546 yards. The start was a standing one, and the close an absolute stop. Among the first three in the finish was a woman, Mme. Delon, who drove a 40 horsepower Gardner-Serpollet. Her time was 38.3-5 seconds.

M. Leadre, on a 70 horsepower Mors, made the best showing for heavy cars, doing the stunt in 38.4-5 seconds. M. Becornais, on a light Darracq, made the fastest time, requiring only 35 seconds.

## Another California Meet.

The recent automobile meet at Del Monte, Cal., excited so much interest that there is talk of holding a large meet at the Ingleside track in November, and the matter is under consideration by the Automobile Club of California. It is probable also that an afternoon will be devoted to automobiles at the State Fair at Sacramento, and there is a proposition for an automobile meet at Fresno during the current month.

## No Profit for Columbus.

Financial success did not attend the recent race meet of the Columbus (Ohio) Automobile Club. The total attendance was only 3,500, and, while there will not be any loss, the net financial gain, if there is any, will not exceed \$50. The members of the club had a day of enjoyment for themselves and friends, however, and they are lucky to have no deficit to make up.

## Increased Automobile Valuation.

The Cleveland (Ohio) Board of Tax Review has practically completed the task of revaluing the automobiles of the city, having had conferences during the last few days with nearly all of the owners. A substantial increase has been made to the tax duplicate in consequence.

## Automobiles Make Horses Faster.

It was noticed by people at the fair in Nashua, N. H., last week that in the horse race which followed each automobile event on the day devoted to automobile races every winning horse got below its previous record. The horsemen ascribed the fact to the rolling down given the track by the racing automobiles.

## NASHUA'S GALA DAY

### New Hampshire Town out to View Motor Racing—Some Close Contests.

Three events marked Automobile Day at the annual fair in Nashua, N. H., last Thursday. There was a good attendance, and the interest was so general that many of the exhibitors in various departments of the fair closed down in order to enjoy the sport. The grand stand was filled with ladies, and there were a number of automobiles, including a large contingent from out of town, parked in the grounds adjacent to the track.

Each of the events was a five-mile race. The first was divided into two trial heats and a final. In the first heat there were three starters. J. O. Snow drove a 5-horsepower Peerless, F. A. Hinchcliff a 5¼-horsepower Locomobile and Fred A. Wilson a 10-horsepower White. Wilson led for the first two miles, when his machine went wrong. He made one half mile in 50 seconds. The Locomobile was out of commission for a time, and the Peerless, which ran an even race, won the heat. In the second heat the starters were Louis F. Snow, 8-horsepower Stanley; Louis H. McDermott, 16-horsepower Peerless, and Dudley H. Marks, 10-horsepower White. Marks and McDermott were the real contenders in this heat, Marks winning. In the final Marks and Snow made an excellent race considering that the track is only a half mile, with no banks on the turns. Marks won in 8:33½.

Ross, on a 6-horsepower Stanley, won the second event, with Snow, 16-horsepower Peerless, second; Marks, 10-horsepower White, third, and McDermott, 6-horsepower Peerless, fourth. Time, 8:45.

The third and last event was hardest fought, and developed the fastest time. Wilson, driving his 10-horsepower White, won the race in 8:25½; Marks, 10-horsepower White, was second; W. E. Eldridge, 10-horsepower Cadillac, third, and Ross, 10-horsepower Stanley, fourth.

## Cresceus' Automobile Pacer.

George P. Ketcham's trotting stallion Cresceus, driven by his owner and paced by two runners and an automobile, covered a mile in 2:08¾ at Lincoln, Neb., on Tuesday afternoon. The track, a half-mile affair, was in prime condition, and the wind was very light. The time by quarters was: 0:32, 1:04, 1:36½ and 2:08¾. In his time for the mile Cresceus clipped half a second from his best previous time.

At the convention of the National Car Painters and Locomotive Painters' Association, held at Chicago last week, the delegates and their families were driven around the city in automobiles. All the principal points of interest were thus visited.



## RACING AT MILWAUKEE

### Automobile Events at State Fair Disappointing and End in a Disaster.

Thousands of people attending the Wisconsin State Fair at Milwaukee last week anticipated the automobile events of Friday and Saturday with an interest which betrayed itself in the cheers which greeted even the warming-up runs of the two big racing machines, "999," driven by S. Frank Day, and the "Red Devil," driven by Edward Huff. They were disappointed, however, in the big event, for after the two racers got the signal to go, and had made a terrific battle, one of the machines failed to appear when the other emerged from behind a knoll which hid the backstretch from the grand stand.

"Where is the other machine?" everyone asked. They waited and waited in vain, now following the speeding machine as it drew to the north end of the track, and now searching the roadway behind for a glimpse of the second machine. The Red Devil tore past the grandstand and around the south curve again and past the knoll, but nothing could be seen of the rival racer. "It is lost in the shuffle," said some one. The thought went through the crowd that possibly there had been some dire accident and the mangled form of the chauffeur was lying beside the track. No. 999 passed the knoll and continued to the half-mile post and rounded the curve, and was lost to view. Neither of the racers was seen again, and the crowd, which had been tuned to a high pitch of excitement, let its ardor peter out. Disgust took the place of interest. After a long delay the announcer shouted that there had been an accident to the machines, and that the race would be postponed until the next day. In ten minutes the grand stand was almost deserted and the protesting, complaining people wended their way in solid lines to the exits.

Only a few hundred remained to see the other race which followed. It was a five-mile event for touring cars, and was won by W. C. Jones, of Chicago, on a Columbia, in 8 minutes, 21 seconds. Louis Allis's Stearns, driven by a colored chauffeur known as "Black Jack," was second. George Odenbrett drove Louis Allis's Winton and Emil Estberg, of Waukesha, also drove a Winton, but neither cut much of a figure in the race.

The fizzle in the big race of Friday was ominous of the disaster which attended the postponed contest of the gigantic machines on Saturday. There were about 20,000 people present to witness the race. Day was again on "999" and Huff on the "Red Devil." In making the turn around the north end of the track Day's machine turned a complete somersault, crushing the life out of the daring operator, and came to a standstill, a wreck. Day lay on the track with a fractured skull, his collar bone broken

and his left arm fractured in four places and the flesh torn from his right hand. Blood gushed from his nose, mouth, ears and eyes as he gasped a few expiring breaths.

Day had been pushing the machine for all possible speed in order to make a record, if possible. It was on the fourth lap of a five-mile race that the accident occurred. The first mile was made in 1:04½, the second in 2:10 and the third in 3:16. As he crossed the wire in front of the grand stand at the finish of the third mile the chauffeur threw away the stub of a cigar he had been smoking and took a fresh grasp on the lever, as if determined to push the gigantic machine to the utmost on the next round.

Day was not an expert racer, being engaged in the place of Barney Oldfield, who was injured in Detroit the previous week. He had followed the business of auto racing only a few weeks, having previously been connected with the automobile business as salesman and repairer. Before entering the race he wired his parents at Columbus, O., asking their permission to go into the contest. After his death replies to his message were found in his room refusing the desired permission. He was twenty-two years old.

### Gov. Odell's First Ride.

Governor Odell, of New York, took his first ride in an automobile last Friday. He was in Buffalo, and rode from the Iroquois, in that city, to the Hamburg Fair Grounds. His journey was quite a parade of automobiles.

At 11:10 the start from the Iroquois was made. William H. Hotchkiss, president of the Automobile Club, in a handsome Packard, led the way, with the Governor, William C. Warren and President John A. Kloepper of the Fair Association. Dr. Truman C. Martin came next, in a Packard, with George C. Matthews, County Clerk Price and George W. Briggs. P. P. Pierce, driving a Pierce Arrow, was next in line. Then followed H. C. Wilcox, W. C. Jaynes, F. J. Wagner and William J. Connors, in his speedy Winton. Each chauffeur carried a party of invited guests. Crowds witnessed the passage of the procession, and on some favorable parts of the road the Governor was treated to a speed of forty miles an hour.

### Registration in Massachusetts.

Registration under the new automobile law in Massachusetts began on Sept. 1, and up to the 29th the number of vehicles registered was 2,830. Licenses were issued to 3,350 chauffeurs, professional and amateur. The greater number of licensed operators is accounted for by the practice of several members of a family making application for licenses to run the machine owned by one member.

### The First Life Member.

The first person to be proposed for life membership in the Automobile Club of America is W. C. Temple, of Pittsburg, vice-president of the Automobile Club of that city. He was proposed by H. C. Frick and seconded by Charles M. Schwab.

## BRITISH 1000 MILES

### Annual Trials now Under Way Have 140 Entrants—American Cars Among Them.

Everything is in readiness for the 1,000 miles trials of the Automobile Club of Great Britain, which began yesterday and continue until September 25. The entry list reaches 140 cars, which are divided into seven classes, the basis of classification being the cars' selling price.

Twenty cars are entered in Class A, selling at £200 or less, among which are the Oldsmobile and the Cadillac. These are cars for men of moderate means. In Class B, cars selling at more than £200 and up to £300, there are seventeen entries. Class C is for cars at more than £300 and up to £400. There are twenty-four entries in this class. In Class D, cars of more than £400 and up to £550, there are twenty-nine entries, including a 10-horse White steam car. Twenty-five cars are entered in Class E, whose prices range from £550 to £700. Among those entered are a 20-horse Winton and a 10-horse White. Cars costing from £700 to £900 enter in Class F. There are sixteen entries. In Class G are entered six cars, costing more than £900.

### The Duke Went Hunting.

Following the hunt in a fast automobile, the Duke of Roxburghe and his fiancée, Miss May Goelet, set the pace for the big "gallery" who hunted along the road, leaving the cross country riding to more adventurous horsemen and women, during the hunt of the Monmouth County Hounds, near Newport, R. I., on Saturday. The duke led by a considerable distance at the finish, after a ride of ten miles.

### More Mount Washington Climbers.

T. P. Driver, of Melrose, Mass., and F. H. Peabody, of Boston, are the most recent automobile climbers of Mount Washington. They made the ascent on Sunday last in a 4 horsepower gasoline runabout. Their actual running time was 3 hours and 20 minutes.

### Club for Illinois Watch City.

A club has been organized by the automobile owners and chauffeurs of Elgin, Ill. To the number of about twenty they met in the Mayor's office on the evening of August 13, and, after discussing the matter, resolved to apply for a club charter. L. B. Garrison was elected president and Joshua Thomas secretary.

### Want Place on Cup Team.

Four German firms, in addition to the Daimler company, have announced their intention of competing for a place on the 1904 Bennett Cup team. They are Benz & Co., Mannheim; the New Automobile Co., Berlin; the Dietrich Co., Niederbronn, and the Adler Motor Co., Frankfurt.

## SCHEDULE OF BIG RUN

Continued from (page 915.)

October 8th, Nichols House, Bath; October 9th, Iroquois Hotel, Buffalo; October 10th and Sunday, October 11th, Reed House, Erie; October 12th, Hollenden Hotel, Cleveland; October 13th, Tod House, Youngstown, O.; October 14th, Hotel Schenley, Pittsburg.

The route will be abundantly marked with arrows indicating the direction at all times. It has been found that 1,500 arrows will be necessary to properly mark the route, but these will be obtained and erected. There will be, besides, a paper trail laid a few days before the start of the run.

The mayors of towns and presidents of villages along the route have been given notice of the time at which the machines may be expected to pass through, and have been asked to give notice to the people so that spirited horses may be kept off the road and accidents prevented.

It will be necessary for each car to be supplied with a New York, New Jersey and Pennsylvania license. Blank application forms may be obtained at the office of the N. A. A. M.

The interest being taken in the run by residents of the towns through which it will pass and of the outlying country is remarkable. The officials of the towns say that the farmers will be in from all the country round about at the time of the run to see the "automobile fellers."

There will be a big smoker and vaudeville entertainment at Binghamton, and other entertainments have been arranged at other stops, particularly at Bath and at Erie, where Sunday will be spent. At Buffalo the tourists will be entertained at dinner by the Ellicott Club.

Pittsburg will be reached on Wednesday night, October 14th. On Thursday there will be brake and hill-climbing contests, and on Friday and Saturday there will be races.

## The Itinerary:

Tuesday, October 6th.—Start at Weehawken, to Woodcliffe, 1½ miles; Little Ferry, 6¼; Hackensack, 8¼; Ridgewood, 16½; Hohokus, 18½; Waldwick, 19¾; Allendale, 21; Mahwah, 25½; Suffern, 27¼; Ramapo, 29; Slootsburgh, 30¾; Tuxedo, 33¾; Southfields, 37¾; Central Valley, 44¾; Highland Mills, 45¾; Woodbury Station, 47; Mountainville, 50¾; Orr's Mills, 53; Vail Gate, 54¼; West Newburgh, 57¾; Newburgh, 58¼; Cedar Hill Cemetery, 64¾; Marlboro, 67¾; Milon, 71½; Highland, 75¾; Ulster Park, 86¾; St. Remy, 90¾; New Salem, 91¼; Eddyville, 91¾; Wilbur, 92¾; Kingston, 94¾; Stony Hollow, 100¾; West Hurley, 102; Olive Branch, 104¾; Shokan, 108¾; Beechford, 130¾; The Corners, 114¾; Phoenixia, 118¾; Allaben, 123¾; Shandaken, 124¾; Pine Hill, 130¾.

Wednesday, October 7th.—Griffin's Corners, 133¾; Fleischmans, 134; Margaretville, 140¾; Dunraven P. O., 144¾; Andes, 152; Delhi, 165¾; Treadwell P. O., 175¾; Franklin, 182¾; East Sidney P. O., 187¼; Unadilla, 192¼; Bainbridge, 202¾; Afton, 208¼; Nineveh, 214¾; Harpersville Village, 215¾; Belden, 219¾; Sanitaria Springs, 225¾; Port Crane, 228¾; Port Dickinson, 233¾; Binghamton, 236¾.

Thursday, October 8th.—Union, 245¼; Campville, 252¼; Hiawatha, 255¼; Owego, 259¾; Lounsberry, 265¾; Nichols, 268¾;

Smithboro Bridge, 270¾; Barton, 273¾; Elletstown, 278¾; East Waverly, 279¾; Waverly, 281¼; Chemung P. O., 285¾; Chemung Station, 286¾; Wellsburg, 292¼; Elmira, 298¾; West Junction, 303¾; Horsehead's Station, 305¾; Big Flats, 310¾; East Corning Station, 313¾; Gibson, 316¾; Corning, 316¾; Painted Post, 321¾; Coopers, 324; Campbell, 328¾; Savona, 333¾; Bath, 339¾.

Friday, October 9th.—Kanona, 343¾; Avoca, 348¾; Wallace, 351¼; Cohocton, 356; Patchins Mills, 363¾; Perkinsville, 365¾; Dansville, 369¾; Kysorville, 378¾; Sonyea, Craig Colony, 381¼; Mt. Morris, 385¾; Jenseo, 392¼; Avon, 401¼; Caledonia, 408¾; Leroy, 415¼; Batavia, 425¾; Corfu, 437¾; Crittenden, 442; Mill Grove, 445; Bowmansville, 451¾; Buffalo, 462¼.

Saturday, October 10th.—Woodlawn Beach, 472¼; Wanakah, 477¾; Idlewood, 481¾; Evans Centre, 487; Farnham, 492¾; Irving Station, 494¾; Irving, 494¾; Silver Creek, 498; Sheridan Centre, 504; Fredonia, 510; Brocton, 516¾; Portland, 519¾; Westfield, 526¾; Forsythe, 531; Rippley, 534¾; State Line, 537¾; Northeast, 542¾; Mooreheadville, 546¾; Harbor Creek, 549¾; Wesleyville, 553¾; Erie, 555¾.

Monday, October 12th.—Miles Grove, 574¾; East Springfield, 579¾; West Springfield, 583¾; East Conneaut, 587¾; Conneaut, 588; North Kingville, 596; Ashtabula, 602; Geneva, 611¾; Madison, 618¾; Painesville, 623¾; Mentor, 635¾; Willoughby, 640¾; Euclid, 649; Cleveland, 663.

Tuesday, October 13th.—Chagrin Falls, 682¼; Auburn Centre, 690¾; Auburn Corners, 692¼; Troy, 696¾; Parkman, 700¾; Southington, 709¾; Warren, 716¾; Girard, 726; Brier Hill, 729¾; Youngstown, 731¾.

Wednesday, October 14th.—Poland, 736¾; New Middleton, 742¼; Petersburg, 746; Enon, 747¾; Darlington, 751¼; Beaver Falls, 758¾; New Brighton, 760¾; Freedom, 765; Conway, 765¾; Baden, 768¾; Economy, 771¾; Leetsdale, 773¾; Sewickley, 775¾; Glenfield, 779¾; Elmsworth, 781¾; Avon, 783¾; Woods Run, 786¾; Allegheny, 787¾; Hotel Schenley, 793 miles.

## Pittsburg Test Courses Chosen.

Courses for the hill climbing and brake contests to be held at Pittsburg in conjunction with the Endurance Run of the N. A. A. M. have been selected. When Secretary Unwin of the N. A. A. M. was in Pittsburg last week he made an examination of the roads regarded as most feasible, being accompanied by Vice-President Burke and Secretary Smith.

As a result it was decided to hold the hill-climbing contest in Sheridan avenue, between Bond street and Wellesley avenue, while in the near vicinity, on the approach of the Stanton avenue entrance to Highland Park, the brake contest will take place.

Sheridan avenue comes near to the ideal for a hill course. The grade runs 9 per cent at the beginning, then rising 12 per cent and holding that to the top of the hill. The course is straightaway, and better time is expected than was made in the hill-climbing contest by the local club in Highland Park. On that occasion the curves in the serpentine road hampered the machines.

The approach to the Stanton avenue entrance to Highland Park is not level, but it is the best stretch that could be found by the searching party. The grade averages 4 per cent—3 per cent running from the east toward the centre, then leading 4 per cent to the park entrance. There is a dip in the centre, but the depression is so slight that the speed of the automobiles will not be materially affected.

## NO AGE RESTRICTION

## Washington Corporation Counsel Gives a Common Sense Opinion—Competency the Test.

That there should be no ironclad age restriction relative to applicants for licenses to operate automobiles in Washington, D. C., but that each case should be decided on its merits, is the opinion of Corporation Counsel Duvall, of that city.

The board of examiners has held to the opinion that no person under the age of eighteen years should be allowed to operate horseless vehicles. Corporation Counsel Duvall says:

"In a communication from the board the board asks for instructions as to the lowest age limit for issuing permits to operators of motor vehicles, stating that it has refused in two cases to examine boys fifteen and sixteen years of age, respectively, and one boy fourteen years of age has answered the questions asked by the board in a satisfactory manner, but no permit has as yet been made out for him; and the board of examiners, replying to a request for an expression of its opinion upon the subject, is of the opinion that no person under eighteen years of age should be allowed to operate a motor vehicle.

"The aforesaid communication from the board of examiners of applicants for permits is the occasion of the reference to me.

"I am of the opinion that the Commissioners have authority to prescribe a limitation of age in the matter of granting permits to operate automobiles, etc., and that authority may be exercised by a proper amendment to Section 1 of said Article XXIV of the police regulations. It may be likewise exercised without such amendment when and as the Commissioners pass upon the individual applications. In my judgment it is not expedient to amend the regulations for this purpose. The object of the automobile regulations, their justification in law and in fact, is the protection of the life, limbs and property of persons using the public highways against the reckless, inexperienced or incompetent operator of automobiles, locomobiles and motor vehicles.

"The design of the regulations is not to prohibit the use of these vehicles, but to regulate their use with due regard to the rights of other users of the public highways.

"It seems to me the competency of the operator of the vehicle is not to be determined by any ironclad rule; that in determining the competency of applicants they should be considered as units, and not as classes, and that immaturity of age would justify the refusal of a permit if such immaturity constituted incompetency to operate the vehicle. But to adopt the suggestion of the board of examiners and refuse a permit to every applicant under eighteen years of age would, manifestly, in many cases, wrongfully prevent the use of motor vehicles by persons who are quite as competent to operate them as persons who are over the age indicated."

## STORAGE BATTERY FACTS

**Its Function is to Deliver Current Stored up in It—Does not Generate.**

The popular impression is to the effect that a storage battery stores up electricity, and that the bottled up fluid is held somehow under pressure, to be released on demand like highly charged mineral water. The principle of the storage battery is quite different from this, as the entire action is chemical, fundamentally.

The storage battery is a simple piece of apparatus, mechanically. In its most familiar form it consists of two lead plates supporting active materials; a high oxide of lead for the positive plate, and metallic lead in a spongy, finely divided state for the negative. The plates are immersed in dilute sulphuric acid, and contained in a glass jar or wooden tank lined with lead. Two plates, one positive and the other negative, constitute a couple, and a cell may be made up of as many couples connected in parallel as the requirements of discharge necessitate. That is, all the positive plates are connected together separately from the negative plates, which are themselves joined in one aggregation, independent of the positives. A battery consists of a considerable number of cells connected usually in series—that is, the positive group of couples in each cell is joined to the negative group of the preceding cell, so that the electric current passes through all the cells serially.

Now, "charging" a storage battery simply means passing a continuous electric current through it from some outside source of supply, as a railway or lighting generator, and thereby causing certain chemical actions to take place. The energy of the current is thus stored up as chemical changes and recombinations, or, in other words, it is transformed into potential chemical energy. Discharging a battery is naturally the reverse of the process just indicated. The battery is connected to a general power circuit, and it at once begins to deliver current, generated by the reversed chemical actions which begin to take place as soon as opportunity is given for a current to flow. Back goes the battery toward its original uncharged condition, and the cycle may be repeated over and over again, always with the same resulting chemical actions caused by, and then causing, the electric current, says Howard S. Knowlton, in the Engineering Magazine.

### Against the Brussell's Motor Law.

Belgian manufacturers are alarmed at the hostile attitude of the government toward motorists. The Society of Metal Workers held a meeting last week in Brussels, at which two hundred persons were present, to discuss the matter and try to counteract public prejudice. The new rule limits the speed of motor cars in Brussels to three

miles 1,282 yards an hour—less than a walking pace.

"If M. de Mot, the maker of this order, were on his deathbed," said one of the speakers, "he would rather the motoring doctor came to him at fifty miles an hour than three."

Delegations were arranged to call upon the remarkable M. de Mot and get him to revoke his preposterous order.

### Took Car for a Lark.

C. H. Gillette, of New York, left his automobile, a 20 horsepower gasoline touring car, standing unguarded in Greenwich, Conn., on Sept. 6, and when he was ready to start



ARRIVAL OF OLDS TRANSCONTINENTAL TOURISTS AT DETROIT.

away with it he found it had disappeared. He did not recover it until three days later.

Two young men, for whom warrants have been issued, had taken the vehicle for a lark and made quite a tour with it, visiting Stamford, Norwalk, Milford and Westport. At the place last named they met with a mishap and abandoned the car, which was found badly damaged.

### French Cars Mobilization.

The French Minister of War has issued a circular calling on the officers commanding the different corps to make out a list of these going up for their annual period of military instruction who possess automobiles and drivers' certificates. This list is to be sent to headquarters, so that the owners of the cars may be called upon in case of mobilization.

### Two Metropolitan Purchasers.

John Jacob Astor and Clyde Fitch have purchased Cadillac cars from the local Cadillac company.

## SOUTH AMERICAN TRADE

**High Duties and Financial Reasons Preclude any Large Trade Development.**

At the best only a moderate business with South American countries can be looked for. The duties are, as a rule, extremely high, and the number of people able to buy automobiles comparatively few. In Brazil climatic, topographical and financial reasons are against trade, and the 50 per cent import duty adds immensely to the difficulty. The conservative character of the people is still satisfied with ox and mule wagons, and not

six motor cars can be found in the whole of the country. Only Sao Paulo has good roads and a climate in which driving a motor car is a pleasure.

In Argentina the conditions are better and the outlook is not without promise. Twenty-eight cars were imported last year, and the more the people see of automobiles the more popular they become. The least chances offers Chili, where 60 per cent of the value is extracted as import duties, and the pavements in towns and villages consists of round cobbles, which the mechanism of a motor cannot survive.

### Importance of Belgian Industry.

According to statistics compiled by the Chambre Syndicale de l'Automobile, over 9,000 workmen are directly employed in the construction of motor cars in Belgium. This does not include the 25,000 persons employed in trades more or less connected with the automobile industry.

The horse drawn vehicles employed in the postoffice service in Paris are to be replaced by motor cars.

## A NEW DEAL ON TIRES

(Continued from page 916.)

from them. Tires can be made and supplied to automobile manufacturers at any price desired, but the sort of tires that have come into demand through the exigencies of competition during this year have in many cases only aggravated the troublesome situation. It will be better for them to furnish the goods that will last and charge the necessary price. The advance in price on high grade tires has been necessitated by a remarkable appreciation of the raw material. A year ago fine, "up river" Para was quoted at \$8.80, while to day the price is from \$1 to \$1.05 per pound. The increase in the cost of tire fabric is even more astonishing. In the same time it has advanced in price nearly 40 per cent.

Another important action has been taken in relation to the rim question. Some time ago the detachable tire makers, acting in concert with the rim makers, drew up a table of specifications for rims for the tires of various sizes. In the main these have been adhered to, but it was found that slight deviations crept in and increased so that the tires made for the rims conforming exactly to specifications would not fit properly. Now the detachable tire concerns, all except the Dunlop, of course, have arranged to have inspectors at the various rim factories to see that the rims do not vary. Not the slightest deviation from the stipulated measurements will be tolerated. Even a sixteenth of an inch out of the way will not do. The business of the inspectors will be to examine all rims and mark them if they are correct, and tires on rims not having the inspection mark will not be guaranteed. The factories that have agreed to have the inspectors of the tire makers pass on their rims are as follows, and the guarantee of tires will not hold on rims other than these:

The Federal Mfg. Co.  
The Weston-Mott Co.  
The Standard Welding Co.  
The American Tube & Stamping Co.

## Wants Grand Rapids Capital.

Icyergus C. Rothmeier, described as a Cleveland capitalist, arrived in Grand Rapids last week for the purpose of enlisting local money in an automobile plant to be located there. He represents an automobile company recently organized in the East, and the directors are desirous of having the plant erected in that city.

Rothmeier's company is said to own patents which will revolutionize the generating machinery of electrically driven autos. In addition to this, the company owns improved patents on gasoline driven automobiles, chief among them being an arrangement for feeding the fuel.

## May go to Greenfield.

There is talk of moving the works of the Motor Storage & Mfg. Co., Chillicothe, Ohio, to Greenfield, Ohio. Capital is offered by citizens of the latter place. The concern builds the Logan car.

## Raced Just for Fun.

A man of quick action is Manager A. E. Morrison of the Peerless Boston branch. He drove to Lowell last week with a party of friends to witness the races. Reaching there he, just for the fun of it, entered his car in the five-mile race and, although he had never driven on the track in his life, he went in and won the race to his own great surprise. Manager Morrison is a man always on the alert to serve the interests of his company, as this action testifies. He has taken hold of things in Boston in a way that cannot but commend him to the well known Cleveland concern.

## Moyea's Fine Showing.

Among the cars which took part in the run of the New York Athletic Club to Travers Island on Saturday was a Moyea, with H. C. Cryder at the wheel and a Motor World representative as one of the passengers. It is simple truth to say that the car ran in a manner that was in keeping with the reputation it has made, and that reputation has rarely been equalled in the short space of time that went into its making. It ran with a noticeable and thoroughly delightful smoothness and noiselessness, taking the hills with perfect ease and responding to the slightest wish of its driver.

## Delivered Paper by Automobile.

For some time the Denver (Col.) News has been making successful use of automobiles for delivery of that paper to nearby towns on Sunday. On Sunday, September 6, G. E. Hannan undertook, with two Oldsmobiles, to put the Sunday News into Cheyenne many hours in advance of its rivals, and succeeded in so doing. At Cheyenne the early Union Pacific train was met, and the paper was delivered in Ogden and other northern points sixteen hours ahead of the usual time.

## Paterson Holds Carnival.

A parade of automobiles, motor-cycles and bicycles on Saturday night last marked the close of the week's carnival held by the business men of Paterson, N. J. All the machines were decorated, and many of them were brilliantly illuminated. The line of the parade was crowded. Frank W. Stockbridge was the grand marshal.

## Mooreville to Have a Plant.

The Fisher Automobile Co. has been organized at Mooresville, Morgan County, Ind., and will establish a plant there. The directors are J. S. Comer, H. C. Searce and D. F. Swain, Jr.

## Omaha Department Store's Move.

The Anderson-Millard Co., Omaha, Neb., will open an automobile department. A representative of the concern is now in the East arranging for different cars it is desired to handle.

The new British automobile law, the Motor Cars act, as it is termed, does not take effect until December 31.

## JAY JUSTICE FOR MOTORISTS

### Long Island Constables and Magistrates Violate the Letter and Spirit of the Law.

The jay constables and jay magistrates on Long Island have changed the venue of their traps for the annoyance of automobilists, and are operating on the twelve-mile stretch of road between Woodlynne and Far Rockaway, chiefly in the neighborhood of Woodmere. That they are violating both the spirit and letter of the Bailey law can be seen from the experience of Winthrop E. Scarritt, vice-president of the Automobile Club of America, who was on a car the driver of which was arrested and fined on Sunday last.

"We were coming from New York and going in the direction of Far Rockaway," said Mr. Scarritt. "At Woodmere we saw an arrowed sign telling us to slow down to eight miles an hour. This we did. The arrow, though, pointed toward us and in the direction of New York, as do all the arrows along that stretch of road. In other words, there is no notification of where the speed limit belt ends. We had passed the thickly built section of Woodmere, and, reaching a point where the houses were several hundred feet apart, naturally supposed we had passed the restricted zone, and quickened our speed to twelve miles or so an hour.

"A constable came out from the bushes and told my host he was under arrest. He was taken before Justice Jay and pleaded the lack of warning, through the direction of the arrow on the signboard, without avail. He was fined \$10. While we were there another luckless driver was brought in and fined.

"Oh, yes. We get a lot of 'em," said the Justice. "We fined six of 'em yesterday."

"The fine, you will notice, is placed at a paltry \$10, which any autoist will pay rather than take the trouble to fight it. I have called the attention of the Automobile Club of America to the matter, and there will be 'something doing' in a few days."

## Events for Kansas City.

The Kansas City Automobile Club will hold its first annual race meet on the grounds of the Driving Club on October 8. Besides a number of local drivers who have entered, there are promised entries of machines for exhibition purposes by manufacturers in Philadelphia, Detroit, Toledo and other places.

Louis Curtiss will give a speed exhibition with his thirty-horsepower machine, now being built. Other Kansas City men who will race are: D. F. Plazzek, A. W. Armour, H. E. Thompson, Rechter Brothers, E. P. Moriarty, M. C. Albertson, F. A. Hubbard, Ned Halliwell and Roy Sanborn.

Following the example of other countries, the Russian Government is about to formulate a law governing the use of automobiles.

## WHAT PABST NEEDS

### Automobile Trucks Will Solve the Pavement Problem Confronting Milwaukee Authorities.

The Pabst Brewing Co., which from the location of its plant is compelled to haul all of its output to the freight depots, is trying to secure automobile trucks that will enable it to abandon the use of horses for trucking, says the Evening Wisconsin. It would prefer vehicles propelled by electric power to those which use gasoline or steam, as it could charge the vehicles with its own dynamos while they are lying idle at night. As the Pabst establishment is one of the largest of its kind in the world, it ships a vast amount of its product, and uses a large number of trucks. Success on the part of a maker of automobile trucks would therefore mean a large amount of business for the lucky builder.

Chestnut street, one of the leading business thoroughfares of the West Side, is worn out by the tremendous amount of teaming to and from the Pabst brewery. No pavement has yet been found that will stand the wear and tear of this heavy and continuous traffic. Some years ago the street was paved with stone, but the blocks were worn off at the corners and made round, and the street was rough and noisy. After much pleading on the part of the business men this worn-out stone surfacing was torn up and a fine vitrified brick pavement laid. The surface of the street looked so fine when the job was completed that the business men were overjoyed. They organized a celebration and illuminated their stores and saloons. But the bricks have been ground to powder by the wheels of the beer trucks, and Chestnut street is again in a sad condition of disrepair.

The property owners along this street are therefore quite as deeply interested in the automobile truck problem as the brewing company itself. The substitution of electric power for horses and wide tired trucks for the beer wagons now in use would relieve Chestnut street of the grinding traffic against which no surfacing but the noisy granite block pavement can stand for any great length of time. A brick pavement would then be sufficient, or asphalt, notwithstanding the steepness of the grade in some places.

A general introduction of automobiles would be beneficial to both business and residence streets. The wear on residence streets is by the feet of horses and by narrow wagon tires. The wear from the former cause would cease entirely, while the wider tires of the automobiles would serve as road rollers and keep the roadways in good condition. Moreover, there would be less need of cleaning the streets with automobiles doing all the wheel traffic than there is now, when horses are the rule rather than the exception.

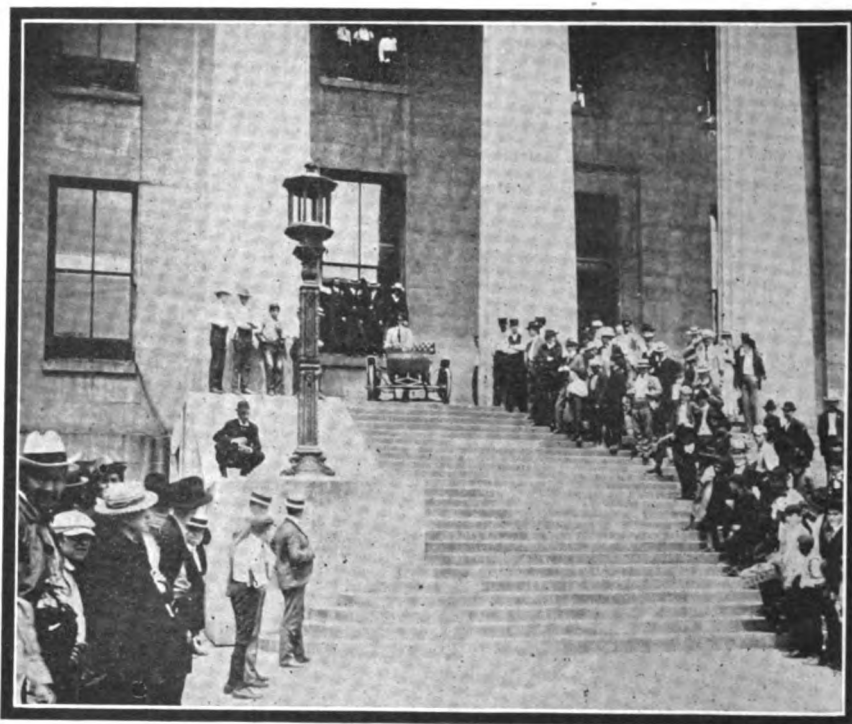
### Some Hoosier Combinations.

Owners of automobiles in Indiana are obliged to carry their initials on their vehicles, as numbers are carried under the Bailey law in New York. This has produced some curious combinations in Indianapolis. George A. Gray, J. A. McKim, Dr. O. N. Eastman, H. A. Davis, H. O. Smith and E. E. Landers are some of the owners with whose initials some fun is had, and the Smith and Landers outfits especially excite comment, as one is a H.O.S. and the other an E.E.L. Of the latter it is said that it ought certainly to be smooth running.

## RUN TO TRAVERS ISLAND

### Annual Fall Outing of N. Y. A. C. Motorists was Well Attended—Who Were There.

Fifteen automobiles started in the automobile run of the New York Athletic Club on Sunday last, but reinforcements picked up along the route increased the number to fifty-one. The start was made from the clubhouse in Central Park South shortly after 11 o'clock with the Travers Island clubhouse as the destination.



OLDSMOBILE AFTER ASCENDING STEPS OF LOUISVILLE, KY., COURT HOUSE.

### Tempts Men to Drink.

Police Captain Louis Kreuscher, of Far Rockaway, started on his vacation last Thursday, accompanied by his wife, and will spend the three weeks in an automobile tour, during which he will visit points in New England and make a trip to Chicago. Captain Kreuscher owns his automobile, which he allows to be used as a police patrol wagon in the winter, when the regular wagon is withdrawn from that outlying precinct. The calls for it are infrequent, but there are men who will take the consequences of a simple drunk for the sake of a ride in it.

### Poughkeepsie Is Cut Out.

Owing to the fact that at Poughkeepsie a trotting meeting will be in progress on September 30, and the hotels unable to furnish accommodations for the automobilists, the route of the pleasure tour of the Automobile Club of America, September 25-30, has been changed so that the night rendezvous on September 30 will be at Newburg, and the return to New York made down the west side of the Hudson. This will lengthen the day's run from sixty-nine to eighty-two miles.

Whitney Lyon, chairman of the Run Committee, carried as guests in his automobile (Walter), John R. Van Wormer, president of the New York Athletic Club, George Phillips and Fred Vilmar. Among others who made the run were E. E. Britton (Panhard), who had with him Mrs. Bird S. Mellor and Miss Lakelan; W. K. Vanderbilt, Jr. (Renault), and two friends; J. M. Hilliard (Panhard) and Robert Gray, Mr. and Mrs. Zittell (Searchmont) and F. T. Lee, E. B. Gallaher (Richard) and friends, W. Gates (Rambler) and party, H. Ostrander (Oldsmobile) and friends, Dr. S. Oppenheimer (Winton) and guests, H. S. Elliott (White) and friends, Hart O. Berg (Berg) and A. D. Ranier, W. W. Kimball (Mors) and friends, A. Le Maitre (De Dietrich), Morris Nason (Clement), H. C. Cryder (Moyen), J. S. Thompson (Locomobile), and Robert Smith (Oldsmobile).

The short spell of dry weather had made the roads very dusty, causing great discomfort to all but the leading members of the party.



## SEMI-SOLID ELECTROLYTE

### For Filling Accumulators is Spoken of Favorably by a British Critic.

What is termed a new electrolyte of a semi-solid character, designed for the filling of accumulators, is described by the *Auto-car*. The strong feature of the new accumulator, which is put out by a London concern, was its remarkable powers of recovery, so that it maintained its efficiency for considerably longer than the ordinary accumulator, the improvement in this respect after a continuous series of experiments working out at as nearly as possible one-third.

It was also found that the cells could be subjected to the most violent use in the way of unduly rapid charging and discharging without the plates suffering to anything like the usual extent.

As there is no fear of pellets dropping out of the plates or sediment collecting beneath them, there is no need to allow as much space between the plates or at the bottom of the cells as is the case in acid batteries. It is also necessary, in order to get the electrolyte into the cells easily and to allow it free action between the plates, to provide somewhat larger vent holes, and to substitute separating pieces or forks between the plates in place of the corrugated celluloid sheet which is usually used. These and other small points made it necessary to entirely alter the dimensions and arrangements of the present celluloid boxes, especially in the case of the armored accumulator.

As to the practical work of the accumulator, it will, of course, be understood that the makers are able to fully form and charge the plates before the sulphate of lead electrolyte is put in. When this is done, the accumulator can be sent out ready for instant use, and will continue working like an ordinary acid accumulator. In course of charging, a certain amount of moisture is evaporated, and it is necessary to add a little distilled water from time to time, as required, in the same way as an acid cell, owing to the fact that in charging the water is split up, the oxygen being absorbed on the plates, and the hydrogen lost.

### France's Best Customer.

France rightly regards the automobile industry as one of the most valuable she possesses. In addition to the enormous domestic trade, the exports reach a splendid aggregate, the total for the present year already being in excess of \$5,000,000. The exact figures are \$5,643,865. Great Britain was the chief buyer, her purchases being more than one-half the total, or \$3,835,385. Belgium and Germany are the next best buyers, while the United States is credited with an astonishingly small total—less than \$100,000 worth. The figures follow:

Exported to—	Value.
Great Britain.....	\$3,835,385
Italy .....	83,430

Belgium .....	408,765
Germany .....	371,885
United States.....	85,810
Spain .....	79,720
Netherlands .....	70,200
Switzerland .....	55,650
Russia .....	40,780
Other foreign countries.....	256,310
Algeria .....	227,035
Tunis .....	75,980
Indo-China .....	20,010
Other colonies.....	30,405

Total .....\$5,643,865

### Dispute Over Valuations.

More than \$125,000 worth of automobiles are said to be in the Appraisers' Warehouse in this city awaiting valuation. Many of them cannot be turned over to their owners until disputed questions of value have been settled by the Board of United States General Appraisers. It was said that very few automobiles are accepted by the customs officials at the values appearing on the invoices, and that as a consequence delays in getting the machines out of the warehouse are frequent.

### Productive Persecution.

It is small wonder that the fining of motorists on various pretexts is a favorite pastime in England. It is profitable, and at the present rate of progress road maintenance will be a simple matter, for motorists' fines will more than pay for it.

During the last seven months of 1902 the sum total reached \$9,220. With the spreading popularity of the sport, the total for 1903 to the present date has reached \$20,780, the first three weeks of August alone bringing in \$5,720.

### Utilizing Automobiles in Italy.

The Italian military authorities are coming into line with the other great powers, and in their forthcoming military manoeuvres motor cars will be used for the first time. A large number of automobiles have been placed at the disposal of the principal officers, who are expected to be convinced of their utility for the purpose of keeping in touch with the various points during the proceedings.

### Prize for Touring Cars.

Professor Hubert Von Herkomer, the famous artist, has presented a \$2,500 trophy to the Bavarian Automobile Club for international competition, not for speed, but for the best tourist cars adapted to general road work, mountain climbing, excellence of brakes and baggage capacity. One of the points of the award will be consideration and courtesy shown by drivers to the non-automobiling public.

### Oily Floor's Damage.

An immensity of damage is done to tires through allowing cars to stand on a floor or asphalt which has been saturated with oil. The best preventive would be to scatter sand or gravel on the floor of the garage and sweep it out every few days. In many cases sawdust is used, but if this is allowed to lie for any period there is danger of combustion.

## CARDAN VERSUS CHAIN

### Frenchmen Make Comparison of the two Methods of Transmission—Both Have Advantages.

The respective merits of the two most used types of transmission came in for considerable discussion during the Automobile Congress at Paris.

Live rear axles and side chain transmission each have their relative advantages. F. Drouin, while being unable to conclude in favor of one or the other, yet thought that with the employment of the pneumatic tire the cardan shaft with live rear axle would tend to entirely replace the side chains and stationary axle. Chain transmission had the advantage of simplicity and ease of repair as well as facility for altering the gear, but required frequent attention and caused a number of little inconveniences. The cardan shaft is well inclosed, and requires no attention; but in case of breakage there is no remedy except to send the car back to the works for repair. There was not much to choose between the two systems as regards efficiency.

Max Richard said that an objection had been raised against the cardan system on account of the weight of the axle, and it had been said that as the axle should be as light as possible on a fast car, there was a limit beyond which the cardan could not be used with advantage; but as long as there was an elastic suspension between the wheel and the road he thought that the weight of the axle had no importance at all. The transmission running in an oil bath was always likely to give better results than an unprotected chain.

### Difficult to Denaturize.

European countries are generally taking up the question of the use of alcohol as a motive power for autocars, and the Russian Minister of Finance has now given permission to proprietors of agricultural spirit factories, for the period of three years, to use their spirit, after having made it chemically unfit for drinking, for such purposes as driving motors without having to pay the heavy excise duty. It is thought that this will create a big opening in Russia for spirit motors, but it is feared that "the difficulty is to find means of spoiling the taste of the spirit to such an extent that the Russian peasant will not drink it."

### Prizes for Fright-Proof Horses.

A novel form of competition took place at the annual show held by the North Ribblesdale Agricultural Society at Settle, England. Prizes were offered for horses which stood quietest in proximity to motor cars. All the horses stood the test in a most satisfactory manner, the motors meanwhile buzzing in and about in as tantalizing a fashion as possible. Eventually the prize money was divided equally among the competitors.

## SLOWING METHODS

### Use of Brake Unnecessary—Throttling and Ignition Changes Much Preferable.

Many comparatively inexperienced motorists have trouble in making speed changes, especially when approaching a town. They know that they should change from top speed, but they also understand that, if running on it, the second speed cannot be put in at once owing to the fact that the car is running too fast for it. Consequently they put on the brake, and when they have got the speed down to about the right degree they put on the second, or medium, speed, so as to run quietly through the populated area.

It is far better to adopt a slightly different plan. On approaching a town the clutch should be put down and the car allowed to slow. There is no need to touch the brakes, unless one should be descending a hill. When the car has slowed down sufficiently the second speed can be put in. It is not only a question of using a low gear when driving through a town, but it is always advisable to throttle the engine, so that it is running with the minimum amount of mixture and as quietly as possible. With a good engine a considerable variation of speed can be obtained by the ignition alone and without touching the clutch or brakes. Of course, in congested areas even under these conditions the second speed in the case of a three speeded car may be too high, and it will be necessary to go on to the first.

When running with the engine throttled some little practice is required to avoid stopping it altogether with an ungoverned engine, but it is very soon acquired. It is a point which seems to be very much neglected, as one so often sees cars running through towns with the engine obviously unthrottled and working almost at its full power, the clutch and the brakes being in constant use, and the whole effect upon the public is bad. Not only so, but the car, tires and engine are being put to a lot of unnecessary wear and tear.

### Seek to Exclude From Parks.

There is friction between the Park Board of Kansas City, Mo., and the Kansas City Automobile Club, because the board on August 26 adopted a resolution to exclude automobilists from the Cliff Drive and all the park driveways except the boulevards. There is talk of asserting, in court if necessary, the claim of the automobile to the same privileges as other vehicles on the public highways.

A point has been made by a park official, however, that puts the question in a different light from that in which the members of the Automobile Club are disposed to view it. It is asserted that driveways in the parks are not subject to the same conditions that govern thoroughfares. The city charter vests

in the Board of Park Commissioners absolute authority over park driveways. The board may exclude dray wagons or any vehicles that may interfere with the pleasure or safety of those who use light harness vehicles.

### Mud Guard Eluded Him.

In the trial of Dr. Henri de Rothschild before a Parisian police court recently on a charge of driving his automobile at an unlawful speed there was an amusing scene.

The policeman who appeared against the physician alleged that the automobile flew

## SHE LIKES SPEEDING

### Wife of Record-Breaker Oldfield Accompanies him on his Practice Spin.

Mrs. Barney Oldfield, wife of the famous automobile speed maker, accompanied her husband on the Winton "Bullet" in some of his fast practice miles at the Driving Park in Cleveland, Ohio, last week. When she was asked if the experience was not rather exciting for a woman, she replied:



A JOLLY PROVIDENCE PARTY IN AN AUTOCAR.

down the Rue d'Amsterdam and was stopped at the Gare St. Lazare by the policeman seizing the mud guard. Dr. de Rothschild argued that it would be impossible for any person to perform such an act if the automobile were going at any great speed.

To test the matter the automobile was set in motion in the courtyard of the Palais de Justice and the policeman chased it all over the enclosure, but was unable to seize the mud guard. This enabled Dr. de Rothschild to escape the charge of disobeying the orders of a policeman in the exercise of his duty, but the charge of excessive speed was sustained and the doctor, as already announced, was sentenced to one day's imprisonment, and to pay a fine of \$2.

It was left for the municipality of Vaures, France, to reach the height of absurdity in automobile legislation. They passed a bylaw enacting that "two motor cars travelling at the same pace must not pass one another."

"It is not only exciting but borders on the sensational. The feeling and experiences traveling a mile a minute in a little light racing automobile is very hard to describe.

"I don't think I shall ever forget the sensation of the first three or four miles, although I have ridden a great many times with Mr. Oldfield on road runs when he frequently would be driving thirty-five miles an hour. I have always had a desire to ride a mile a minute with him on one of the racing machines, but he will not permit me. I worried about him a great deal when he drove what the newspapers call the Red Devil or 999, but since he has been racing in the new Wintons my mind has felt much more at ease.

"I'm going to ride with him a mile a minute the first opportunity I have, as the faster one goes the more she likes it. You have to hold on, I tell you, for dear life, and all the time you are wondering if you are ever going to get into the next straight stretch.

## CANS AND CAN'TS

### Provisions of British Motor Car Act Epitomized —Its Severe Penalties.

Now that British motorists know they must, after December 31, submit to the restrictions and exactions of the new Parliamentary motor car law, they are studying it with some care. It does not appear much more palatable at close range, the only material advantage conferred by it being the extension of the speed limit from twelve to twenty miles an hour. In some quarters even this is looked upon with disfavor. It is held that it will prove a weapon in the hands of anti-motorists, to be wielded with deadly effect, inasmuch as it inflicts a hard and fast rule applicable to all cases.

The various things which the motorist can and cannot do under the Act are thus epitomized:

You must not drive your car recklessly or negligently, or at a speed or in a manner which is dangerous to the public. In deciding whether the speed or manner of driving is reckless the magistrate must take into consideration all the circumstances of the case, and the amount of traffic actually on the road, or reasonably expected to be on the road at the time.

If you drive recklessly in view of a police constable, and refuse to give your name and address or produce your license on demand, or if the motor-car does not bear the mark or marks of identification, you can be apprehended without a warrant.

If the car is being driven by one who is not the owner, and the driver drives recklessly, and refuses to give his name and address, the owner of the car must disclose the name of the driver, failing which he may be held liable.

For a first offence you may be fined £20; for a second or subsequent offence, £50 or three months' imprisonment, whichever the Court decides.

Every motor-car must be registered and a number assigned to it by a County Council or Borough Council, for which a fee of £1 will be charged. The charge for a motor-cycle is 5s.

If you do not register your car, and you had reasonable opportunity for so doing, or the number becomes obscured, and you cannot prove that it is accidentally obscured and that you have taken reasonable precautions to prevent it becoming obscured, you are liable.

For a first offence you may be fined £20; for a second or subsequent offence, £50 or three months' imprisonment, whichever the Court decides.

If you are a manufacturer or dealer in motor-cars you can, by payment of an annual fee of £3, use a general identification mark on any car on trial.

You must not drive a car or employ any one to drive a car unless the driver be li-

censed. The charge for a license is 5s, and and it must be renewed every twelve months. If demanded by a police constable, you must, while driving a car, produce your license. Failing to do so, you may be fined a maximum penalty of £5.

If you are over fourteen years of age you may obtain a license to drive a motor-cycle; if you are over seventeen you may obtain a car license. You cannot obtain two licenses.

If you are convicted of a first offence under this Act your license can be suspended for such time as the Court thinks fit, and the Court may disqualify you from obtaining a fresh license for as long as it thinks fit.

The Court cannot suspend your license for a simple offence against the speed limit, except on a third conviction.

If you are convicted the Court will cause particulars of the conviction to be written on your license, and will send a copy of the particulars to the place from where you obtained the license.

Your license cannot be indorsed for a simple infraction of the speed limit except on a third conviction.

If you fail to produce your license for indorsement within a reasonable time you will be guilty of an offence under this Act.

For a first offence you may be fined £20; for a second or subsequent offence, £50 or three months' imprisonment, whichever the Court decides.

If the Court disqualifies you from obtaining a license, and you think that it is not justified, you may appeal against its decision. If the Court thinks fit it may defer the suspension of your license pending the appeal.

You must not lend your license or registration number to any one, or fraudulently alter it in any way.

For a first offence you may be fined £20; for a second or subsequent offence, £50 or three months' imprisonment, whichever the Court decides.

If you are driving your car and an accident happens because of your car, and the accident happens in your sight, you must stop and, if required, give your name and address, also the name and address of the owner of the car, and the car number. If you do not you may be fined £10 for a first offence and £20 for the second offence. For a third offence you may either be fined £20 or one month's imprisonment, whichever the Court decides.

If you sell your car the transfer of the registration and number will cost 10s.

If you lose or spoil your license you can obtain a new one for 1s.

You must not drive your car at a greater speed than twenty miles an hour.

In those places where conspicuous notices are placed you must not drive your car more than ten miles an hour.

If you drive at more than the regulation speed of ten or twenty miles, as the case may be, you may be fined £10 for a first offence, £20 for the second offence and £50 pounds for a third offence. The evidence of

two persons is necessary to convict you of exceeding the twenty-mile limit.

It would appear, from the wording of the Act, that one witness only is necessary to convict you within the ten-mile area.

Notice of intended prosecution for exceeding the speed limits must be given you not more than twenty-one days after the offence.

If you are fined more than £1 you may appeal against the decision.

You must pay a yearly male servant tax of 15s. for the driver of your car.

If your car is exceptionally heavy you may be debarred from crossing over the Menai Bridge.

It is understood that the penalties named are the maximum allowed. It is only in aggravated cases that the maximum penalty is inflicted.

### British Clubwomen Active.

The Women's Automobile Club of Great Britain and Ireland is as progressive as if it were an American institution. Many American women, it may be remarked parenthetically, are expert automobilists, but they have not gone so far as their transatlantic sisters and organized a club of their own.

This British women's club has secured for use as a headquarters for six months from October 1 a large drawing room on the ground floor of the Hans Crescent Hotel, in London, which will be fitted up as a reading and writing room for the exclusive use of members. Special terms have been made for members at Harrod's garage, which is about two hundred yards from the hotel.

As the headquarters will be admirably adapted to the purposes of a lecture room, it is proposed to arrange for a course of lectures in the autumn by prominent automobile experts.

### Cause of Side Slip.

That the stability of a car—that is, its immunity from side slip—is very largely due to the disposition of the weight is now pretty generally admitted. In proof of the contention a transatlantic user tells of his experience with two De Dion cars. The first had both engine and transmission gear at the back, and it was exceedingly unsteady in grease, side slipping on the slightest provocation. The second had the engine in front, and the gear is far back, while the weight of the two passengers is pretty evenly distributed, being practically in the centre. As a result the car is absolutely steady in grease, and can be driven at top speed over almost any mud.

### South Africans Open the Season.

The South African winter being over, the motorists of that country are once more active and alert. On August 8 the Automobile Club of South Africa ran through mud and slush to "Groot Schurr." Over twenty cars left Greenmarket Square, Cape Town, at 2:30 p. m., while others joined the meet at the rendezvous. In the list were three Oldsmobiles and two Toledo steam cars.

## CAR BESTS BULL

### Haughty Monarch of Phillippi Farm Succumbs to Automobile After Hard Fight.

When Farmer Phillippi, of Champaign, Ill., bought an automobile his neighbors did not hesitate to express uncomplimentary opinions of him for his renunciation of the horse, which was good enough for their use, and therefore good enough for him. It was a strange event which caused them to look upon the automobile with respect.

Farmer Phillippi owned a bull, which was the terror of the vicinity. It had gored one man to death and injured others. This bull had the run of a forty-acre lot on the Phillippi farm.

One day recently Phillippi, who had been traveling about his farm, stopped his automobile in front of the gate that led into the bull's pasture. Attracted by the strange sounds of the machine, the bull stood still in his tracks. He then made his way slowly toward the fence, sniffing suspiciously. As he came nearer suspicion gave way to rage, and he began to paw the earth with his hoofs and horns.

Thinking to go away and remove the irritating spectacle from under the eyes of his bull, he "tooted" the horn once and prepared to reverse the lever of the machine. But the effect of the "toot" was so remarkable and instantaneous that it brought Farmer Phillippi to a dead stop. The bull no longer reared and plunged. From being a very formidable animal it appeared suddenly limp and tame. With one meek look at the automobile, the animal scampered across the pasture.

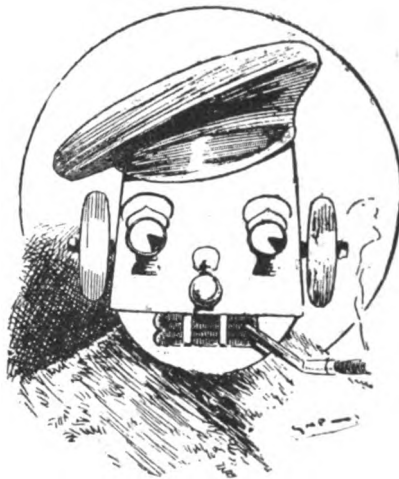
Farmer Phillippi was amazed. Never before had he been able to frighten that unconquerable bull. Pushing open the gate of the pasturage, he drove his machine in pursuit, and for a time this scheme worked admirably. The bull, seeing himself pursued by a strange foe, and hearing the uncanny voice that challenged him, started on an ignominious run. Full of elation, the farmer tore after him. Back and forth they raced through the pasturage for a good ten minutes before the bull recovered from his scare. At the end of that time the blowing of the horn ceased to frighten him.

Farmer Phillippi suddenly noted with discomfiture that the bull had ceased to run. The animal had now planted his fore feet in the soil, and with lowered head prepared to attack. It was then that the owner of the machine realized the danger into which he had carelessly allowed himself to be drawn. His only chance now was to turn the power of his machine against his enemy. Cautiously backing a few yards to get a running start, he threw the lever open and started forward, the machine gaining in velocity at every foot of ground it covered. The bull was entirely unprepared when the machine crashed into him, almost breaking

his neck with its terrible impact and throwing him sprawling upon the ground.

In an instant he was on his feet, and Phillippi realized that the battle had but begun. With his horns menacingly advanced and his eyes glittering, the bull made another stand. But before he had time to act his owner plunged at him again with all the impetus he could summon, and again the bull was sent off his feet.

The conflict was now becoming serious, and every new assault only redoubled the energy and animosity of the bull. As the bull charged afresh, the farmer made a swift detour, and, coming up in the back, struck the animal's rump, tumbling him head over heels. This unexpected maneuver shook the bull's courage, and as soon as he regained his feet he struck across the pasture, bellowing with anger and terror, while Farmer Phillippi, who saw that his



A European Conception of the Motor Face.

chance lay in pressing every advantage, tore after him, "tooting" his horn and adding to the fright of the unhappy beast.

Meanwhile in the neighboring fields the news had spread that somebody was being killed by Phillippi's bull. Arming themselves with pitchforks and clubs, the farmers started on a run toward the pasture, but arrived in time only to witness the utter subjection of the hitherto untamable beast, which at last had met more than its match.

### Absurd French Speed Regulation.

The Mayor of Riviere, France, which is near the famous grotto of Dargilan, has issued an order limiting the speed of motor cars in his parish to six kilometres an hour. Motorists must sound their horn loudly on approaching a corner. The Mayor of Rheims, city of champagne and jackdaws, limits the speed in that place to eight kilometres. But under the decree of M. Combes the prefects have the power to countermand the orders of mayors.

### Takes the Place of Air.

Dr. Robert J. Christie, of Quincy, Ill., according to the Herald of that place, "is filling his automobile tires with a patent composition which will make it unnecessary to ever pump it again. It is a jellylike stuff that takes the place of the air."

## CLIMBS MOUNT HOOD

### Portland Motorist Ascends Lofty Sierran Peak Almost to the Top.

J. B. Kelly, of Portland, Ore., has won the honor of being the first man to climb Mount Hood in an automobile. His vehicle was a single seated one, in which he left Portland on Saturday, August 29, to carry provisions to his family, who were camping at the foot of the mountain. He returned to Portland on the Wednesday following, having in the mean time made his ascent of the mountain.

"I could hardly expect to reach the summit," said Mr. Kelly when he returned from his trip, "but I can tell you that an automobile will bring a man within 2,000 feet of the notch. With the machine it is possible for a man to leave Portland on a Saturday morning, ride 10,000 feet up Hood's slope, walk to the summit and be home in time for dinner on Monday.

"The grade was steep, and the front wheels would often fly off the road and spin in the air. The run was exciting and exhilarating, and, never thinking of danger, I turned the power on full. The brake gave way, but, relying upon the engine, I kept moving up the trail that is travelled by saddle horses and occasionally by teams. Every once in a while I would stick in the bogs and would have to drive forward to make a track, then run back and then forward again in order to force my way through. The trip up to the height of 8,000 feet was a delightful one, and I believe I could have gone to the snow line. I had not time to make it, however, as I had to return to the camp and bring my wife and children back to town. Coming home we ran slowly, on account of the broken brake, but arrived in six hours."

### Maeterlinck and the Candle.

Maurice Maeterlinck is a poet, and is presumably not in a class which understands the mysteries of mechanical construction. Nevertheless, he possesses a mind which will descend occasionally from the heights of Parnassus to grope among prosaic facts, abstract and concrete. It busied itself with the concrete facts of an automobile a few days ago, and sought the aid of a lighted candle in the investigation of what makes the automobile go. As gasoline is one of the concrete facts in the case, there was an explosion which nearly put him in the same unfortunate class of poets as Homer and John Milton. Fortunately, however, he retains his eyesight, together with a larger personal fund of knowledge concerning automobiles than he had previously possessed.

### Women in French Factories.

Large numbers of women are employed in French motor factories. They enamel, superintend the cutting out of cogs on steel gear wheels, working big files and much other work which is usually done by men.

### New Patching Method.

Most motorists are only too well aware of the difficulties attending the patching of inner tubes and of the propensity of cemented patches to come loose sooner or later. Especially is this the case if the tire is used on a speedy car. To such an extent is this true that not a few users declare that no patch will stay unless it is vulcanized. This is an extreme statement, of course, but there is a germ of truth in it, as far as racing and similar cars are concerned.

In view of this the Michelin concern has lately introduced a perfected device for instantaneously repairing punctures in inner tubes.

The device, which is called the Comete, consists of a small rubber rivet with a hollow stem, closed at one end. Into the open end a blunt punch or tang of a file is pushed and the flat head of the "rivet" well solutioned on the underneath. The puncture is also solutioned, and when dry the rivet or plug is forced through the puncture, the tube being stretched in order to increase the diameter of the puncture and to facilitate the pushing in of the plug.

Having pushed the plug well into position, a shot is next introduced into the hollow stem of the plug, and pushed well through the inner tube, and the puncture is mended. The size of the shot used depends on the diameter of the puncture; if this be of extra large dimensions a bearing ball as used on cycles is recommended, but for ordinary punctures swan shot is quite large enough.

### Cedar Rapids Celebration.

Cedar Rapids, Iowa, is to have a carnival in October, and among the grand parades promised is one for which arrangements are being made by the Commercial Travellers' Club for Travelling Men's Day, October 9.

An invitation having been extended to the Cedar Rapids Automobile Club to join in the parade, that organization has accepted, and will reciprocate in a novel way. About thirty-five members of the club, with ten or fifteen other automobile owners from nearby places, will send each his automobile into the parade with only the chauffeur occupying a seat. The remaining accommodations of each vehicle will be placed at the disposal of the visiting travelling men.

### Judge Reduced the Fine.

Justice Ely, of Evanston, Ill., who has been busy with automobilists from Chicago, and has fined a number of them for driving too fast, is apparently open to argument in some cases. Sherman Rarey, operator for Dr. Frankelintau, who was arrested on a recent Sunday and before the justice on the following Thursday pleaded that as he was taking the doctor to see a patient he thought it was necessary to hurry.

This plea appeared so reasonable to the justice that he fined the man only \$10, instead of the usual \$20, and seasoned his leniency with a warning not to do it again.

### Why Cars Slip.

The cause of side slip with automobiles has always been understood to be the greasy state of the roads, but, according to M. Carlo Bourlet, it is the result of a multitude of influences in which "percussion," shocks and centre of gravity play a more or less important part.

M. Bourlet's practical conclusions are that a car will have much less tendency to side slip if the total weight is distributed over the four wheels; if the heavy parts of the mechanism are concentrated in the centre of the vehicle; if the car has a long wheel base, and the braking is done on the differential.

One of the causes of side slip is the defective steering gear. It is impossible to have a perfect steering gear with levers, though it may be sufficiently good for all purposes except racing cars. For high speed cars it would be necessary to have mathematically correct steering gears, and it is not easy to accomplish this with levers. M. Bourlet has worked out a mathematical gear comprising eighteen levers, which, though mathematically correct, is not practical.

### Use of the Hose.

The proper washing and cleaning of an automobile require some little skill. In the case of the body itself the same treatment is necessary as with a carriage, and any experienced coachman would instruct one in the proper methods. The use of the hose however, is simply a matter of common sense. It is necessary, in order to remove the dust and mud, but if directed indiscriminately may cause a great amount of trouble. For example, in cleaning any portion between the gear box and the clutch, great care should be taken that the water does not reach the clutch or the leather will swell. This may result in the clutch jamming, and in any case will cause it to be jerky in use. A thorough cleansing with kerosene oil will help to put matters right, with a subsequent treating with castor oil. Water should be kept carefully clear of the coil and battery, or short circuit will undoubtedly occur. It should not be directed on to the commutator either, and, as far as possible, should be kept away from the wires.

### In the Sheep Column.

A statement emanating from the office of the State Auditor of Minnesota, crediting only two automobiles to Hennepin County, has brought out a curious fact in regard to the listing of these and other items of personal property. Automobiles are listed for the most part with vehicles, as there is no separate column for them on the listing sheets. One country assessor placed automobiles in the column designated for "sheep."

An up to date bank at Brussels uses an automobile to make collections. The car has a limousine body, which is fitted up with cash drawers, files, etc.

### Efficiency of Worm Gearing.

Worm gearing is believed to have a low efficiency, to be expensive and difficult to make and troublesome to maintain, and to demand, for even moderate success, a great deal of attention, says the Engineer. Although it has had more learned investigation than any other kind of gearing, and more experiments have been made and more invention expended on it, it is still distrusted as it was before modern methods of accurate machining were adopted and modern alloys had been discovered. This low opinion was originally based upon experiments conducted with badly designed and badly constructed gear.

The condemnation has been wholly undeserved, and it may now be safely asserted that for a given speed ratio worm gearing, made according to modern methods, not only compares very favorably in efficiency with other forms of gearing, but in some cases actually surpasses any other type. The chief cause contributing to the improvement of worm gearing is the recognition of the fact that efficiency increases with the angle of pitch up to about 45 degrees, but the requirement of irreversibility has limited the pitch in practice to 10 degrees. To be absolutely self-locking the angle of pitch in a well-made and fitted gear must not exceed 6 degrees.

### Look to the Wiring.

Nearly all cheap cars, and many cars which cost a substantial amount, are fitted with second rate insulation to the electric wires, with the result that after a little use trouble begins. Now, it is an admitted fact that about nine-tenths of the roadside troubles arise from ignition, and it may be taken for granted that a large proportion of these are due to the wiring being originally faulty. It will, therefore, be seen that if the motorist wishes to avoid much inconvenience, loss of time and expense, he should make quite sure that the wiring is the best that can be procured for money.

### Utilizing the Compression.

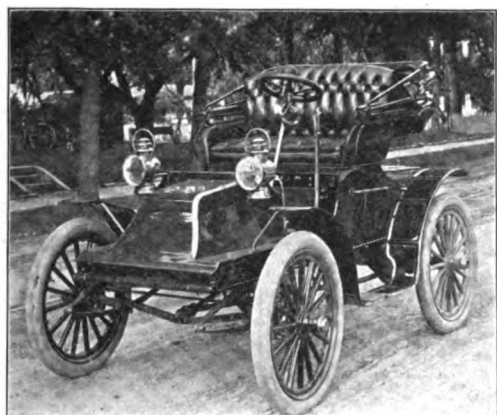
Many motorists make use of the compression in combination with one or other of the brakes for retarding the car downhill. There are a number of makes in which the hand brake does not disengage the clutch. In most cases it is quite easy to disconnect this brake from the clutch lever. One motorist never had the brake connected to the lever at all, and consequently had much greater security in descending hills, being able to use both compression and hand brake together, while keeping the foot brake in reservation.

### To Avoid Crank Knocks.

When cars are not provided with an ignition control spring to keep the spark normally retarded, the novice should see that the ignition mechanism is retarded before he starts the motor. Otherwise he may receive a nasty knock or even have his arm broken.



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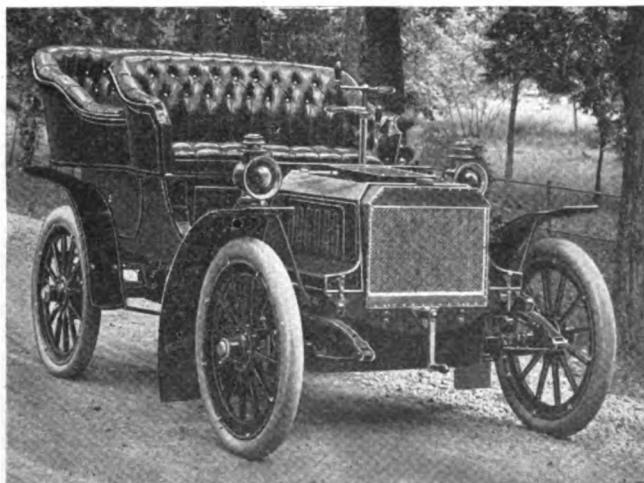
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## The Week's Patents.

737,764. Mode of and Apparatus for Regulating the Charge and Discharge of Storage Batteries Used in Conjunction with Dynamo-Electric Machinery, etc. Robert S. McLeod, Manchester, England. Filed January 19, 1903. Serial No. 139,666. (No model.)

Claim.—1. In apparatus as herein described, in combination with a main generator and a storage battery, a booster the armature of which is connected in series with the battery across the generator mains, a motor adapted to drive the booster, a series coil on the booster field in which the current varies as the main current, a shunt coil on the booster field in which the current varies as the main voltage, and a coil on the booster field in which the current varies as the difference between the main voltage and the battery voltage, substantially as described.

737,816. Elastic Tire for Vehicles. Wilhelm Balassa, Vienna, Austria-Hungary. Filed December 19, 1902. Serial No. 135,895. (No model.)

Claim.—1. In a sectional elastic tire, the combination of semicircular sections provided with flattened ends adapted to abut one against the other, lugs on said sections, faces on said sections adapted to engage the wheel rim, said faces being of greater degree of curve than the circumference of the rim, and bolts adapted to secure said sections to the rim.

737,879. Means for Volatilizing Gasolene. Francis E. Stanley and Freelan O. Stanley, Newton, Mass. Filed November 8, 1901. Serial No. 81,622. (No model.)

Claim.—1. The combination with the boiler, vapor burner provided with a mixing tube, intermediate combustion chamber, nozzle opposite the mixing tube, and hood over the boiler, of a vaporizing coil extended within the hood above the flues of the boiler to be heated by gases passing upward through said flues, and a pipe section extending between the burner and bottom of the boiler communicating with the coil and arranged to conduct the vapor from the coil across the burner and to the nozzle, substantially as set forth.

737,887. Vehicle Body. Alpha O. Very, Springfield, Mass. Filed January 19, 1903. Serial No. 139,522. (No model.)

Claim.—1. A vehicle body comprising a casing at one end thereof to inclose a seat, portions of the casing opening outwardly; supports for said opening portions consisting of a frame secured to said casing in a po-

sition to support said portions in open position.

738,064. Vehicle Tire. Adolf Prinzhorn, Hanover, Germany. Filed May 11, 1903. Serial No. 156,658. (No model.)

Claim.—1. The combination with a tire and a nut held therein; of a screw having an enlarged roughened head slightly projecting beyond the tread of the tire, substantially as described.

738,100. Automobile Controlling Mechanism. Hermann F. Cuntz, Hartford, Conn., assignor to Electric Vehicle Co., Jersey City, N. J., a corporation of New Jersey. Filed June 12, 1903. Serial No. 161,220. (No model.)

Claim.—1. In a motor vehicle, a brake, means for locking said brake, source of power, means for regulating or controlling the application of the power, and connections whereby said brake locking means is not effective when the power is applied.

738,110. Reversible Galvanic Battery. Ernst W. Jungner, Norrköping, Sweden. Original application filed April 17, 1899; serial No. 713,428. Divided and this application filed June 23, 1902. Serial No. 112,932. (No model.)

Claim.—1. In a reversible galvanic cell, an alkaline electrolyte and electrodes therein having active masses of metallic oxygen compounds, said active masses insoluble in the electrolyte under all conditions of working, substantially as set forth.

738,167. Automobile Controlling Mechanism. George H. Day, Hartford, Conn., assignor to Electric Vehicle Company, Jersey City, N. J., a corporation of New Jersey. Filed Jan. 16, 1903. Serial No. 139,321. (No model.)

Claim. In an electric vehicle, a motor, a source of power, a current-controller, a separate cut-out switch, means for breaking said vehicle, and means for voluntarily locking said brake in applied position, said locking means co-operating with said cut-out switch whereby the locking of the brake in an applied position co-operates to prevent the application of power to the motor.

738,241. Motor-Vehicle. Winfield S. Rogers, Keene, N. H. Filed Jan. 24, 1902. Serial No. 91,005. (No model.)

Claim. 1. In a motor-vehicle, the combination of front and rear wheels, a vehicle body sitting down between said wheels, a driver's seat at the rear of the body, and a passenger compartment at the forward end

of the vehicle of greater width than the body portion, and carried thereby so as to extend out over the front wheels.

738,415. Cushion-Tire for Vehicle-Wheels. Jules N. Dages, Brussels, Belgium. Filed April 18, 1903. Serial No. 153,225. (No model.)

Claim.—1. A cushion-tire for the wheels of vehicles characterized by the arrangement, within the hollow annular space inclosed by a rim, 1, and a flexible cover, 2, which latter is secured by fortified edges d, fitting into recesses in the rim 1, of three portions, a rigid ring, 4, of metal, wood or both; an elastic portion or cushion, 3, having a circumferential hollow, k, placed between the exterior periphery of the ring 4 and the cover, and an elastic ring, 5, having a circumferential hollow, n, acting as a buffer between the interior periphery of the ring 4 and the rim 1.

738,566. Vehicle-Tire and Method of Manufacturing same. Clarence D. Nirdlinger, St. Louis, Mo. Filed Nov. 22, 1902. Serial No. 132,475. (No model.)

Claim.—1. The herein-described process of manufacturing elastic vehicle tires, it consisting in first forming a tube or sheathing of rubber, washing the interior of the said sheathing with formaldehyde or equivalent material, and then filling the said sheathing with a flowing viscid material capable of setting or hardening, said filling material being subjected to pressure while being introduced and simultaneously forcing the air from the interior of the said sheathing, substantially as set forth.

738,690. Explosive-Engine. Jesse D. Llon, Pittsburg, Pa. Filed Jan. 28, 1902. Serial No. 91,591. (No model.)

Claim.—1. A gas-engine, provided with a cylinder, an air-compressing chamber exterior to the cylinder and communicating with the interior thereof, exhaust ports leading outwardly from the cylinder, and a mixture-valve chamber provided with a compressing valve having check-controlled inlets opening into its interior, and a port leading from the compressing chamber to the cylinder.

738,718. Galvanic Cell. Lothar Fiedler, London, Eng., assignor of one-half to George Pearson, Pitfour, Ilford, Eng. Filed Dec. 22, 1902. Serial No. 136,281. (No model.)

Claim.—1. A galvanic cell comprising a positive-pole electrode of lead peroxid, a negative-pole electrode of cyanid zinc and mercury and an electrolyte comprising sodium silicate, sulfuric acid and mercuric sulfate, as set forth.

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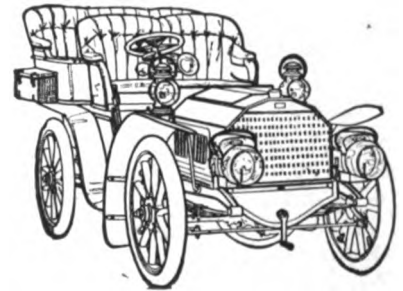
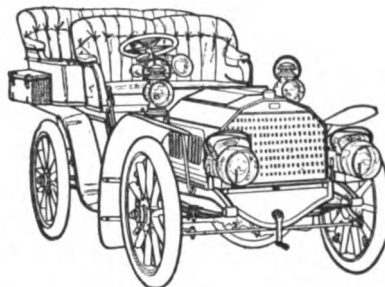
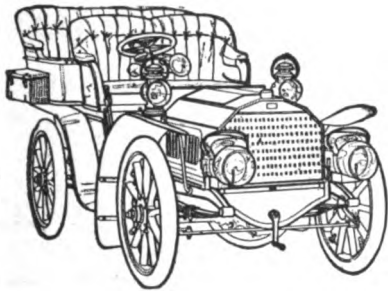
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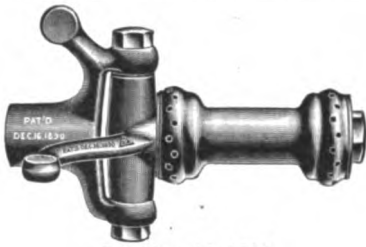
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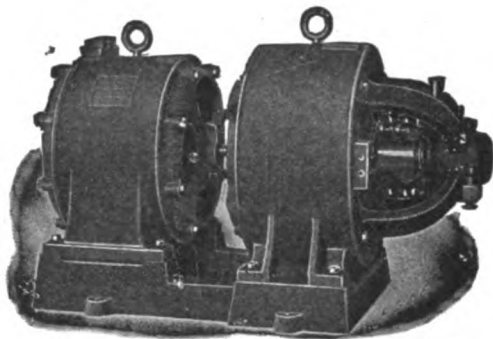
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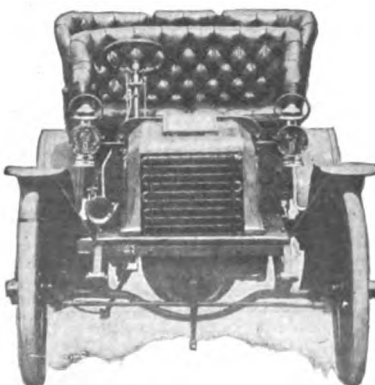
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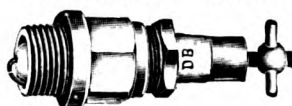
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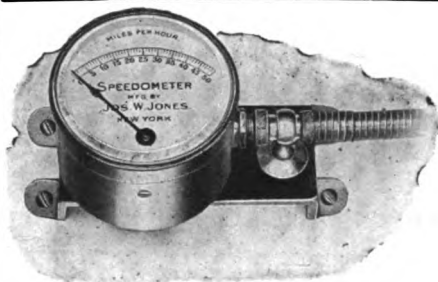
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Highest type of cars made—Send for Catalog.

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## SCHUG SPARK COILS

YOU USE THE BEST IN THE WORLD.

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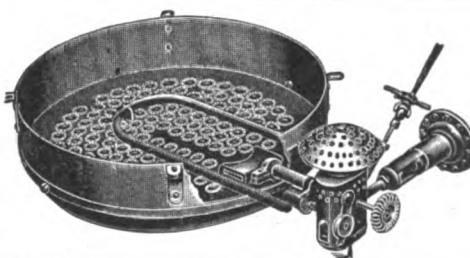
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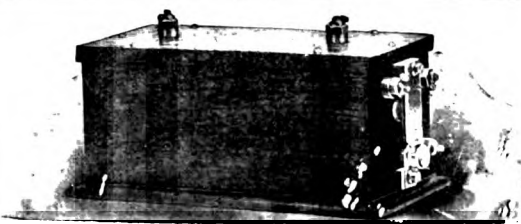
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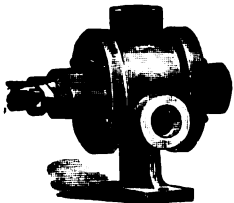




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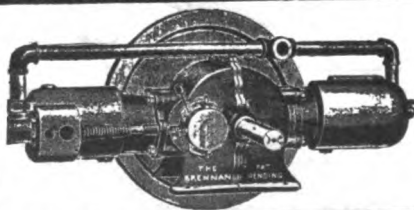
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during the summer months. The most pleasant resorts in the world are in Michigan.

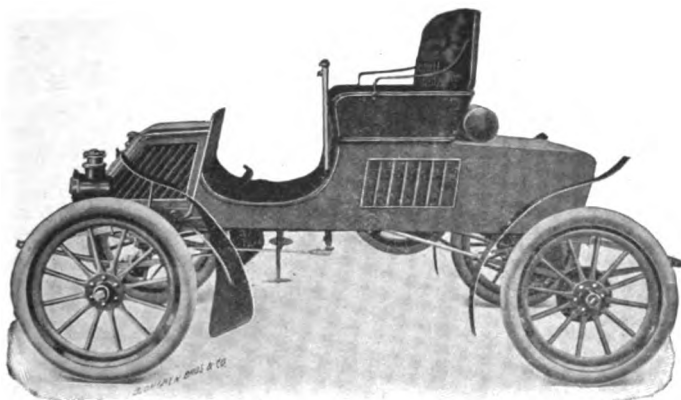
The various resorts extend all along the east coast of Lake Huron from Detroit to Machinac. Accessible from Cincinnati and the South via



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of a legitimate agent is his reputation, which is based on the goods he sells. That is why the selling agency for the

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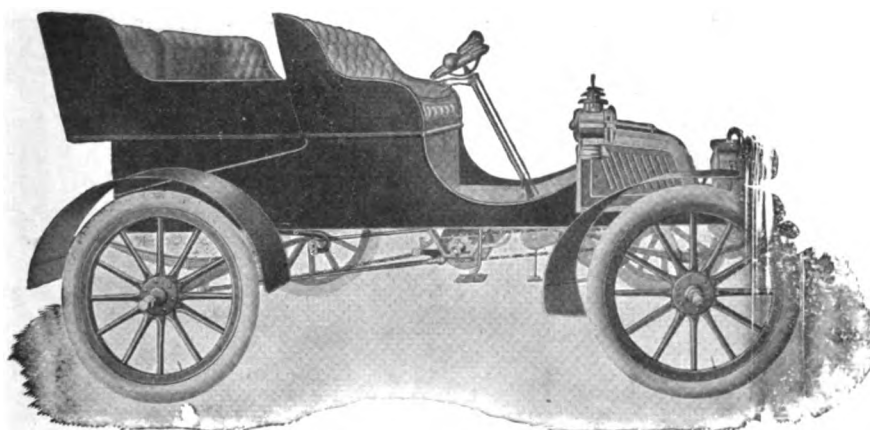
is so coveted. Another reason is, the satisfaction the car gives, and its everlastingness. It has gained its reputation in two years' service, in every country where motoring is possible. Our booklet "W" describes it graphically; let us send you a copy.

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**ONCE MORE**  
That  
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has brought down  
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**55 4-5 seconds.**

They did it at Yonkers, N. Y., July 25th.

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ANY REPUTABLE MANUFACTURER OR DEALER WILL SUPPLY THEM.

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*IN RACING, AS IN TOURING, THE FAVORITE OF TWO CONTINENTS.*

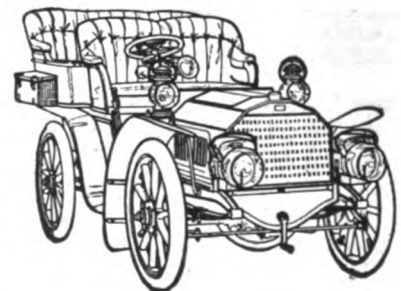
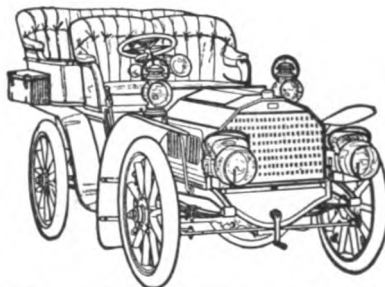
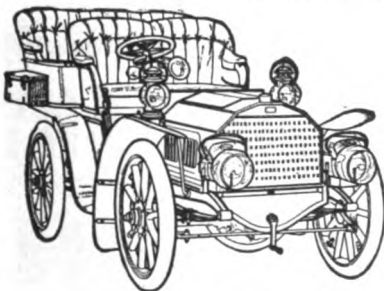
The records of recent race meets show the DARRACQ CARS First over the wire and First in Popularity among enthusiastic automobilists.

At Cleveland, September 5—10-Mile Handicap Race, - DARRACQ First, Time 11:52 2-5

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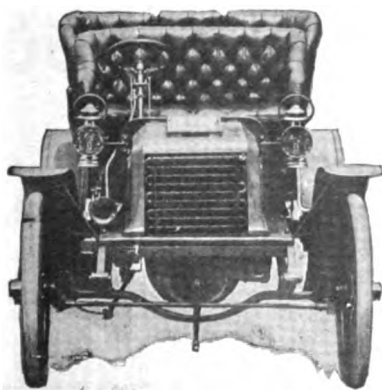
Also Record Fastest Mile, 1:4 3-5; Exhibition Mile, 1:00 3-5



AMERICAN DARRACQ AUTOMOBILE COMPANY, Controlled by F. A. LA ROCHE CO.

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the name of being a fast touring car and a good hill climber.

The PREMIER Motor Car is built to meet the approval of automobilists who, as the result of experience, have become discriminating buyers.

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At the big automobile meet held in Cleveland, Sept. 4th and 5th.

THE 14 RACES RESULTED IN THE FOLLOWING AWARDS TO MACHINES EQUIPPED WITH GOODRICH TIRES :

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<b>6 Seconds,</b>	<b>1 Fourth,</b>
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Also used on the machines driven by Barney Oldfield in his 10 mile race against time. A splendid piece of racing and a new world's record for 1800 pound machines. Time 10:06.

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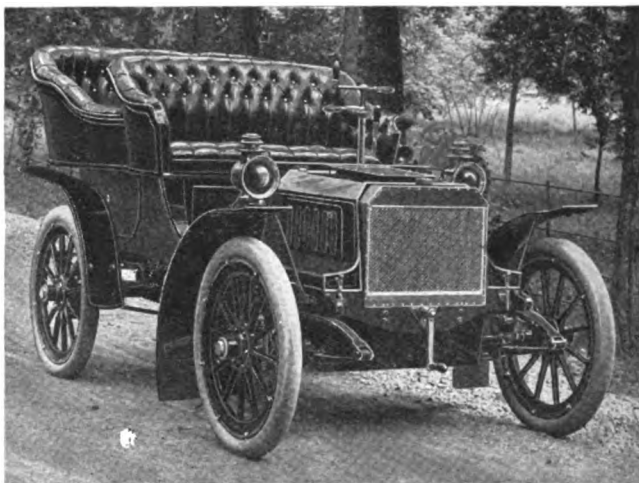
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**ELECTRICS CHARGED, REPAIRED AND KEPT IN FIRST-CLASS ORDER.**



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**Sells best  
to those who  
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**Sells from  
New England  
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**COMBINES ARTIST'S TALENT AND ENGINEER'S SKILL.**

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**THE AUTOCAR COMPANY,      Ardmore, Penna.**

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## IN WHEELS.

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25-H.P. CUDELL  
with light running touring body.

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8 H.P. 1 Cylinder Runabouts	20 H.P. 4 Cylinder Touring Cars
10 " 2 " Touring Cars	25 " 4 " " "
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60 H.P. 4 Cylinder Touring Cars

All fitted with honey-comb radiators, chain or bevel gear drive according to order.  
Our standard body for above cars is divided seat, King of Belgians Tonneau.  
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THE  
AUTOMOBILE  
WITH A  
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To  
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DO YOU REALIZE the number of doctors in your territory who are looking for Electric Automobiles?

DO YOU REALIZE that the well-tried Studebaker is just as satisfactory in winter as in summer?

DO YOU REALIZE that a sale to one doctor leads to many sales to others?

*Complete line can be seen at our branch houses in all principal cities.*

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A prominent mechanical engineer, recently remarked that there were really four methods of automobile propulsion: Electricity, Gasolene, Steam and "The White." He was emphasizing the injustice of comparing the White with steam machines in the common acceptance of the word. As a matter of strict fact the *White* is incomparable from every point of view. It is simple, speedy, noiseless, free from vibration, a good hill climber, in short, a comfort to its owner.



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Runs like a little sewing machine.



A 4-cylinder Locomobile Touring Car. Front vertical motor.

The Best Development in  
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**L**UBRICATION is automatic, being started or stopped as the spark is switched on or off; **governor** acts on the mixture and also times spark automatically; **valves** removable and replaceable easier and quicker than any other gasolene car; spark plugs won't short circuit and are connected to cables by chains, instead of the usual ever-snapping wires; **throttle** on steering wheel permits of speeds from 6 to 40 miles per hour on high speed gear.

A handsome hanger of our 4-cylinder "King of the Belgians" car, printed in four colors and gold, will be sent to any dealer on application.

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United States Letters Patent No. 549,160, granted to George B. Selden, Nov. 5, 1895, controls broadly all gasoline automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following-named manufacturers and importers:

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The Kirk Mfg. Co.  
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E. R. Thomas Motor Co.  
Buffalo Gasoline Motor CO.

These manufacturers are pioneers in this industry and have commercialized the gasoline vehicle by many years of development and at great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacture. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasoline automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturer or importers will be liable to prosecution for infringement.

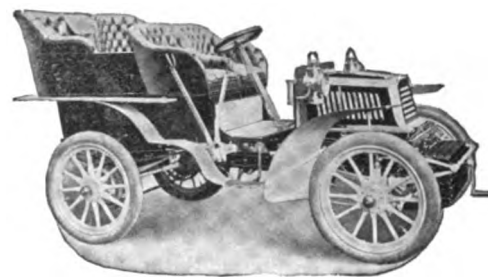
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When you buy your car, buy it to stand steady use on these hard roads.



## The Searchmont

is built for the hardest roads that are ever travelled. It is tested over such roads. It is a handsome car for the boulevard, but also of wonderful strength and durability.

It is easily

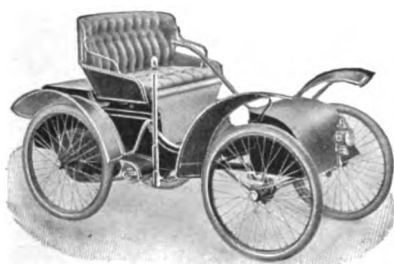
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FACTORIES: Searchmont, (near Chester) Pa.

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PRICE  
ONLY  
**\$450**

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"We like it very much, and I must say that it more than comes up to my expectations. It seems to have lots of power to spare. I ran it around Central Park and tried it on some of the hills and did not have occasion to use the low gear."

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AGENCIES IN PRINCIPAL CITIES.

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The rubber or leather top and storm apron protect the driver and the perfected mechanical construction makes the OLDSMOBILE the favorite vehicle for fall or winter journeys.

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UTICA, N. Y.—C. H. Childs & Co.  
WASHINGTON, D. C.—National Capital Auto Co.  
HAWAIIAN ISLANDS—R. H. Halstead, Honolulu.

## LIST OF FOREIGN AGENCIES.

GREAT BRITAIN & IRELAND—Charles Jarrott & Letts Ltd., 45 Great Marlboro St., London, England.  
GERMANY—(All Germany except Cologne)—Earnest Weingaertner, Berlin; Cologne, L. Walter & Co.  
FRANCE—Eugene Merville, Paris.  
SWITZERLAND—Automobile Fabrik Orion AG., Zurich.  
ITALY—Victor Croizat, Turin.  
HOLLAND—Bingham & Company, Rotterdam.  
NORWAY, SWEDEN, DENMARK—T. T. Nielsen & Co., Copenhagen, Denmark; L. P. Rose & Co., New York.  
RUSSIA—Th. Thansky & Co.  
CANADA—Hyslop Brothers, Toronto, Ont.  
MEXICO—Oldsmobile Co., Mohler & De Gress, Mexico City.  
ARGENTINE REPUBLIC—Ramon Camano & Company, Buenos Ayres.  
SOUTH AFRICA—White, Ryan & Co., Cape Town; Sheriff, Swingley & Co., Johannesburg and New York.  
NEW SOUTH WALES—Knowles Auto. & Power Co., Sydney.  
VICTORIA—Hall & Warden, Melbourne.  
QUEENSLAND—James Smith & Sons, Brisbane.  
SO. AUSTRALIA—Duncan & Fraser, Adelaide.  
WEST AUSTRALIA—American Motor Car & Vehicle Co., Fremantle.  
NEW ZEALAND—W. A. Ryan & Co., Ltd., Auckland.  
JAPAN—Bruhl Bros., Yokohama and New York.  
ASIA MINOR, INDIA, CEYLON, CHINA, JAVA, SUMATRA, BORNEO, FORMOSA—New York Export & Import Co., New York City.

WRITE FOR ILLUSTRATED BOOK TO

**OLDS MOTOR WORKS,** 1332 Jefferson Ave., **Detroit, Mich.**

Members of the Association Licensed Automobile Manufacturers.

# THE MOTOR WORLD.

A WEEKLY JOURNAL DEVOTED TO THE AUTOMOBILE  
AND KINDRED INTERESTS.

Volume VI.

New York, U. S. A., Thursday, September 24, 1903.

No. 26

## TO ACT AT LAST

**License Association Forced by Certain Members  
to Prepare Suits Against Jeffery and Ford,  
Who are Ready for Them.**

After a two days' session of the Association of Licensed Automobile Manufacturers, held at 7 East Forty-second-st., New York, at which twenty-five of the twenty-seven members were represented, General Manager George H. Day was asked what he had to say about the business transacted. He replied:

"Well, I do not know what I can tell you except that we have had a very harmonious meeting, and that everything is going smoothly."

"I suppose the talk had to do largely with the plans for controlling the retail dealers?"

"Yes, and protecting ourselves generally. Everyone who spoke here excepting one man has said that he has found that the agents accept the conditions willingly and are only too glad to get the licensed cars to sell. One member said he found two agents who objected, but then the circumstances were peculiar. We have canvassed the whole field, and while there are more outside than inside of the association, we find from the statements of the independent makers themselves that our statement of the proportion of the output made by the association makers is just about right."

"Were there any new members elected?"

"There was one, or rather will be one. The papers are not signed yet and I do not like to say anything until they are."

"Was there anything decided with regard to the door remaining open for new members, or being closed?"

"The door will be open, but so far as those now in the field are concerned it is very nearly closed. There will be a piece of news, big news in a few days."

"Will it be something in the line of litigation—something in the direction of the action to make good for the bluff, as your critics say?"

"I had not that in mind, but that will come. It is something not to be discussed, but to be done."

"What is the paper I saw the members carrying away with them?"

"That was an amendment to the agreement that the manufacturers make with agents. It has been reworded so as to be more sweeping and more binding, and to cover sub-agencies—to close the loopholes."

The amendment is simply a rewording of the second paragraph, as follows:

Now, Therefore, the party of the second part, in consideration of being supplied with licensed vehicles by the party of the first part under this contract, covenants and agrees with the party of the first part (1) that it (the party of the second part) will not, during the continuance of this contract, infringe said patent, nor make, sell, keep on hand or in any manner dispose of or deal in, directly or indirectly, any unlicensed vehicles, that is to say, any gasoline automobiles not manufactured under license of said Selden patent; and (2) that it will not sell, consign or deliver any licensed vehicles purchased from the party of the first part under this contract to any party making, selling, having on hand or dealing in unlicensed vehicles.

The former agreement, of which the first paragraph remains unchanged, was in full, as follows:

In consideration of the fact that the party of the first part has obtained a license under Selden patent No. 549,160, and is paying substantial royalty thereunder, and has agreed as a consideration of said license not to contest said patent, directly or indirectly, or aid others in so doing.

Now, Therefore, the party of the second part, in consideration of being appointed an agent for the sale and disposition of the automobiles manufactured by the party of the first part, agrees that during the continuance of such agency he will not infringe said patent, nor sell, keep on hand or dispose of, directly or indirectly, any automobiles containing the inventions claimed in said patent No. 549,160, not duly licensed under said patent.

From one of the untitled members present at the meeting it was learned that it was finally decided to institute proceedings against both Thomas B. Jeffery & Co. and the Ford Motor Co., who are the most prominent of those outside the Selden fold. It has been no secret that certain of the licensees who have felt most keenly the Jeffery-Ford competition came to New York determined to force the Association's hand by either obtaining the protection promised them or causing trouble within the ranks. The decision to bring suit against the two Western concerns is undoubtedly the result of their insistence. Both the Jeffery and the Ford people are prepared for action of the sort, however, having notified their agents and patrons that they are prepared to give bonds and defend any suits that may be brought against them.

## FORTY-THREE ENTRIES

**Received for Endurance Contest and Ten More  
Expected—List Is Withheld.**

At four o'clock on Tuesday the entry lists for the endurance contest of the National Association of Automobile Manufacturers were closed, but as all entries put into the mail before that time were acceptable it was decided not to make any announcement about the total of entries for a couple of days, so as to give entries from a distance full time to be delivered.

It was learned, however, that on Tuesday night the entries actually in hand at the time were forty-three, and that the list of probabilities showed ten others reasonably to be expected. Telegrams were sent on Tuesday to prominent makers whose entries were not then in hand.

### Last of the Meteor.

After a short existence, the Meteor Engineering Co., Reading, Pa., will wind up its affairs and go out of business. E. S. Youse, 46 No. Fifth street, that city, has purchased the stock and fixtures of the company, and will continue to supply parts for the cars.

The Meteor Co. made the Meteor and Reading cars, having succeeded to the business of the Steam Vehicle Co. of America, which concern failed about a year ago.

### Pope Closes Uptown Store.

The Pope Motor Car Co.'s line will hereafter be handled at the Pope branch, No. 12 Warren street, this city. Elliott Mason, for many years in charge of the Warren street place, will, of course, continue there, adding automobiles to his present stock of bicycles and motorcycles. The Pope uptown store, No. 500 Fifth avenue, has been closed.

### To Sell Columbias in Boston.

It develops that the Columbia Motor Vehicle Co. of Hartford, the incorporation of which was noted last week, is an offshoot of the Electric Vehicle Co. It will represent that concern in Boston, taking over the business heretofore conducted by the company's branch at that place.

An increase of capital to \$315,000 has been certified to by the George N. Pierce Co., Buffalo. The former capital was \$280,000.

## JEFFERY IN CHICAGO

### Opens Store on Wabash Avenue for Sale of Ramblers—Gunther in Charge.

Hereafter Rambler cars will be handled in Chicago from Thomas B. Jeffery & Co.'s own store. The Kenosha, Wis., concern has come to the conclusion that the interests of its customers and its own will be conserved by such a move, and accordingly a long lease of the store at No. 304 Wabash avenue, immediately adjoining the Auditorium, has been taken.

The store is well adapted to the business, having 30 feet frontage in Wabash avenue, being 175 feet deep, and having easy access to Michigan avenue. The necessary alterations are now being made, the store redecorated and fitted throughout with electric lights, and on October 1 it will be opened, under the management of J. F. Gunther, who was for many years the manager of the G. & J. Chicago store.

The location of this store will cause some surprise, inasmuch as it is not located in "Automobile Row," but is in the heart of the shopping district. It is, however, considered by the Jeffery company most conveniently located. Special attention will be given to visiting out of town agents, many of whom visit Chicago without having the necessary time to get as far as Kenosha.

Mr. Gunther's connection with the automobile industry dates back to the original Rambler made by Mr. Jeffery, in 1899, which, it will be remembered, was a two cylinder vertical engine in front, with a direct drive to the rear axle. His activity for so many years in spreading the virtues of Rambler bicycles has given him an acquaintance in Chicago that should be valuable to his old employer in the new business.

### Buick Goes to Flint.

The Buick Motor Co., which was organized a short time ago, has changed hands. A number of Flint (Mich.) business men, in conjunction with Mr. Buick, have joined together and purchased the concern's holdings, including machinery, patents, goodwill, etc. The work of removing from Detroit to Flint will begin as soon as a 200x60 brick building can be completed.

### Dividend for Spaulding Creditors.

A final dividend of 4.45 per cent, amounting to \$528.59, has been declared by T. E. Lawrence, trustee in bankruptcy of the Spaulding Automobile & Motor Co., Buffalo. A dividend of 10 per cent, or \$1,180.19, had previously been declared. This makes a total of \$1,708.78 received by the creditors, whose claims amounted to \$11,801.90.

Pfeiffer & Young have opened a garage at 129 Grand River avenue, Detroit, Mich.

## Recent Incorporations.

Pierre, S. D.—Reliance Automobile Co., under South Dakota laws, with \$250,000 capital.

Columbus, Ohio—Oscar Lear Automobile Co., under Ohio laws, with \$20,000 capital. Corporators—Oscar S. Lear, E. J. Miller, B. W. Gillfillan, W. Guy Jones and W. H. Holliday.

New York, N. Y.—American Deltrich Motor Car Co., under New York laws, with \$100,000 capital. Directors—R. E. Jarrig, Louis Frankel and Albert Lamaitre, all of New York, N. Y.

Baltimore, Md.—Baltimore Motor Car Co., under Maryland laws, with \$500 capital. Incorporators—Rudolph Lipps, Edward Lipps, Christopher Lipps, George L. Deichman and Christopher R. Wattenscheldt.

Davenport, Ia.—The Stoltenburg & Reimers Co., under Iowa laws, with \$5,000 capital, to manufacture, repair and sell automobiles. President, Henry Stoltenburg; vice-president and secretary, John Reimers.

East Orange, N. J.—The New York Garage Co., under New Jersey laws, with \$50,000 capital; to build and deal in motor vehicles and engines. Corporators—James B. Richardson, Walter H. Bond and Gardner W. Kimball.

Canastota, N. Y.—D. M. Tuttle Co., under New York laws, with \$60,000 capital; to manufacture engines, boats and automobiles. Corporators—Daniel M. Tuttle, William H. Lindley, Frank G. Bell, Otis M. Bigelow and James F. Williams.

Toledo, Ohio—The Kirk-Hall Co., of Toledo, under Ohio laws, with \$10,000 capital; to manufacture, deal in, repair and store automobiles. Corporators—Edward A. Kirk, Charles M. Hall, Edwin J. Marshall, Harold W. Fraser and George C. Bryce.

### Charge for Automobile Insurance.

Automobile risks have been engaging the attention of the New England Insurance Exchange, and at a meeting held at Boston last week the matter of charges was taken up and settled.

A recommendation from the executive committee providing for buildings where automobiles are kept an extra charge of 50 cents per \$100 of insurance for vehicles using steam power with gasoline for fuel, and 25 cents per \$100 for those using gasoline explosion engine power, elicited considerable discussion, and it was finally amended to 75 cents and 50 cents per \$100 of insurance carried, respectively.

This legislation applies only to establishments where not more than three automobiles are kept. Where more than three are stored the building is then considered a special hazard and comes under the consideration of the special hazards committee for specific rating.

Ernest Lamson has begun to handle automobiles at Brockton, Mass.

## GENERAL IS BANKRUPT

### Cleveland Concern is so Adjudicated—Creditors' Meeting Sept. 30.

Efforts made to save the General Automobile & Mfg. Co., Cleveland, Ohio, from bankruptcy have failed. In the United States District Court for the Northern District of Ohio last week the concern was adjudicated bankrupt.

The first meeting of the company's creditors will be held at the offices of Harold Remington, referee in bankruptcy, 943-945, Society for Savings Building, Cleveland, on September 30, at 10 o'clock in the forenoon. Creditors may then attend, prove their claims, appoint a trustee, examine the bankrupt and transact such other business as may properly come before said meeting.

### Four Cylinder Car for Thomas.

Marked changes are to be made in the 1904 Thomas line. Two cars will be made by the E. R. Thomas Motor Co., Buffalo—a two cylinder 16 horsepower and a four cylinder 32 horsepower, respectively. Both will be of the vertical type, in place of the horizontal engines heretofore used.

The details of the cars are being carefully worked out. One of the features is a new sliding gear transmission, having three speeds working direct on the high gear. This gear, for which a patent has been applied, will be found on all the 1904 cars. The other improvements will include honeycomb radiators and extremely powerful brakes. The cars will be built to develop a speed of forty-five miles an hour.

### Is Adjudicated Bankrupt.

As was expected, the National Automobile & Mfg. Co., Milwaukee, Wis., has been adjudicated bankrupt.

Referee D. L. Jones has sent out notices to the creditors of the company that the first meeting of said creditors will be held at Room 434, Postoffice Building, Milwaukee, on September 30, at 10 o'clock in the forenoon, at which time the said creditors may attend, prove their claims, appoint a trustee, examine the bankrupt and transact such other business as may properly come before said meeting.

### Receiver for Westchester Co.

Charley A. Molloy will be appointed receiver for the Westchester Automobile Company in a suit brought by Stephen H. P. Pell, who recovered a judgment against the company for \$296 on August 14, which he has been unable to collect.

Justice MacLean, of the Supreme Court, has now granted a motion by default for the appointment of a receiver. The summons was served on Lawrence E. Holden, the secretary and treasurer. The company was incorporated on December 22, 1902, with a capital stock of \$15,000, and had a store at 523 Fifth avenue, New York.

## A. A. A. BEGINS TO EXPAND

### New York to Set the Pace for a Chain of State Divisions.

It seemed on Tuesday as if the American Automobile Association had awakened with a start and was going to work in earnest. The work being done toward getting the New York State Automobile Association to be a State division of A. A. A. clubs, which was told about exclusively in the Motor World two weeks ago, was brought out in the light at a meeting of the executive committee of the A. A. A. held at the Automobile Club of America on Tuesday. The deal has been made by trading the prestige of the A. C. A. and the Long Island Automobile Club. It is a good stroke of practical politics, and is assured of success. Most of the clubs in the State association, perfected at Syracuse on September 12, are members of the A. A. A. Now it is being held out that the very desirable memberships of the Automobile Club of America and the Long Island Automobile Club can be had on the sole condition that all of the clubs in the State association are members of the A. A. A., and the State body a branch of that national organization.

That the A. A. A. is now in earnest about being a national body is further evidenced by the fact that Chairman Pardington of the race committee has been at work while on the racing circuit during the summer. He reported that a start has been made in Ohio by the Columbus and Cleveland clubs leading the way, and the Toledo club about ready to join them in forming a State division. F. C. Lewin was delegated to get the clubs of Pennsylvania together.

In these State organizations they will be known, as in New York, by the name "Automobile Association," following the name of the State; thus "automobile association" will be a great national name with the American Automobile Association as the parent body of many State organizations.

A handsome emblematic button and an individual membership card were adopted by the executive committee in earnest of its intention to follow the policy of extension rigorously.

The following new committee on scope and plan was appointed: Judge W. H. Hotchkiss, Buffalo A. C., chairman; Lee Richmond, Rochester, A. C.; A. H. Baechle, Utica, A. C.; C. N. Page, Albany A. C.; W. F. Wait, Auburn, A. C.; W. E. Scarritt, A. C. A., and A. R. Pardington, Long Island A. C.

### Thirty-Three Cars in Boston Run.

On Tuesday there were thirty-three cars entered for the Boston and return tour of the Automobile Club of America, to be held Sept. 25-Oct. 1. It was decided that the go-as-you-please idea of the run should be carried out by not having the participants start

in a body at a fixed time, but by allowing them to start whenever they please after first registering at the club house. The list of entries up to Tuesday were:

Entrant.	Vehicle.
Dr. C. T. Adams.....	Oldsmobile
F. A. La Roche.....	Darracq
A. R. Shattuck.....	Panhard
Colgate Hoyt.....	Mercedes
Sidney Dillon Ripley.....	Mercedes
James Macnaughton.....	German-American
Henry C. Cryder.....	Moyea
J. A. Kingman.....	Locomobile
C. H. Gillette.....	Pope-Robinson
Geo. F. Chamberlin.....	White
Robert L. Morrell.....	Locomobile
Orrel A. Parker.....	White
Henry B. Joy.....	Packard
Colonel John Jacob Astor.....	Mercedes
Winthrop E. Scarritt.....	White
Jefferson Seligman.....	Rochet-Schneider
John A. Hill.....	Pan-American
Frank Eveland.....	Autocar
J. Herbert Carpenter.....	Pan-American
Elmer Apperson.....	Apperson
Paul Deming.....	White
Emerson Brooks.....	Cadillac
F. M. Lande and Dr. Lewis Morris.....	Fiat
Frederick Glassup.....	White
M. M. Belding.....	Winton
M. D. Chapman.....	Mors
J. V. Black.....	Packard
W. D. Sargent.....	Packard
Mr. and Mrs. R. M. Owen.....	Franklin
Albert Lemaitre.....	De Dietrich
James L. Breese.....	Mercedes
Dave H. Morris.....	Rochet-Schneider
Mr. and Mrs. Kenneth Skinner.....	De Dion

The itinerary, corrected to date, is as follows:

Friday, Sept. 25—New York to Hartford.....	121 miles
Saturday, Sept. 26—Hartford to Boston.....	124 miles
Sunday, Sept. 27—In Boston.	
Monday, Sept. 28—Boston to Springfield.....	97 miles
Tuesday, Sept. 29—Springfield to Pittsfield, via Huntington, West Becket and Lee.....	55 miles
(Luncheon at Pittsfield.)	
Tuesday afternoon will be spent in optional runs in the vicinity of Pittsfield.	
Wednesday, Sept. 30—Pittsfield to Newburgh, via Poughkeepsie and ferry at Fishkill Landing.....	83 miles
Thursday, Oct. 1—Newburgh to New York.....	60 miles
Total.....	540 miles

The route passes through the States of New York, Connecticut, Massachusetts and New Jersey. Members should display their New York number, which, if bearing the initials "N. Y." after the number, is recognized in Connecticut and Massachusetts.

The New Jersey number must also be displayed when passing through that State.

Route cards and a list of supply stations will be furnished before the start.

### San Jose Witnesses Races.

Automobile races were held at San Jose, Cal., on September 9, the principal event being a five-mile contest, open to machines of any type or power. A White car, driven by H. D. Ryns, won in 7:33.

A race for gasoline cars only was won by a Rambler, and one for gasoline cars of 20 horsepower or less was won by a Winton.

## A. C. A. PREPARES TO ELECT

### A Nominating Committee of Peculiar Personnel—Bostwick Resigns.

In the offices of President A. R. Shattuck, in New York, the governors of the Automobile Club of America held a meeting on Tuesday and appointed a nominating committee to name a ticket to be voted for at the annual election on the third Monday in November. The committee was formed so as to represent the different interests in the club, so it was said. The governors were recognized as having an interest in some way distinct from the members, so this is the way the committee was formed:

George F. Chamberlin, representing the governors.

S. T. Davis, Jr., representing the manufacturing interests.

H. Rogers Winthrop, representing the members.

Mr. Winthrop, the "representative of the members," is the chairman of the law committee, who left the affairs of that committee with regard to the Bailey bill in the hands of President Shattuck, and the action of which committee in this regard was repudiated by the members of the club at the biggest general meeting ever held.

The personnel of the nominating committee led some to think that an independent ticket is likely at the club this fall.

The resignation of Albert C. Bostwick from the board of governors was tendered with the explanation that ill-health and absence from the country would prevent him from serving. A resolution expressing high appreciation of Mr. Bostwick's services and regret at losing him was adopted. The resignation was accepted.

The governors decided that the club would support the A. A. A. in its efforts to establish State divisions by joining the New York State Automobile Association on the condition that all the clubs of that body must be members of the A. A. A.

The following were elected to membership: W. C. Temple, Pittsburg, life member; P. F. Collier, active; Ernest Groesbeck, active; H. P. Robbins, active; P. D. Martin, active; C. K. G. Billings, active; Hugh J. Grant, active; Charles E. Miller, active; Lyman Delano, associate.

Mr. Temple is the first man elected to life membership in the club.

### No Racing at Pittsburg.

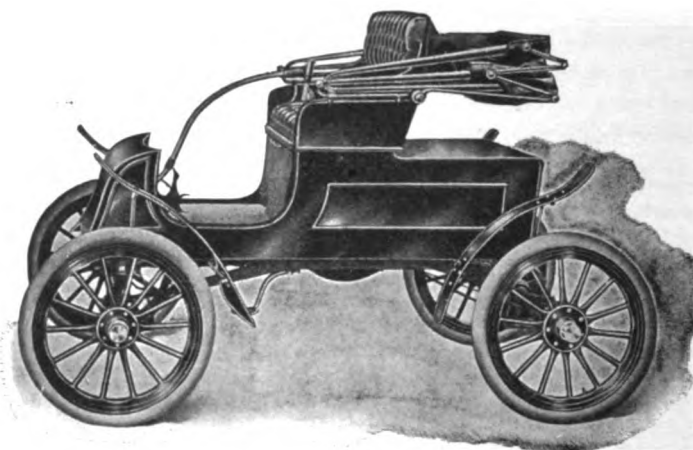
The automobile race meet which was contemplated as a windup of the endurance run to Pittsburg has been declared off. The racetrack is on Grand Island, which can be reached only by boat from that city, and as the boats have discontinued running for the season there is no means of transportation to the island.

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52 State St.

SYRACUSE,  
423 So. Clinton St.

BUFFALO,  
28 W. Genesee St.

DETROIT,  
254 Jefferson Ave.

SAN FRANCISCO,  
114 Second St.





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### Two Passenger Cars' Handicap.

Two points connected with the endurance contest are causing no small amount of cogitation among the firms which have entered vehicles. We refer to observers and repairs. That the two are intimately connected is, of course, obvious.

The observer may aid the operator of his car in making repairs. We say "may" advisedly. There is no rule compelling him to do so, and none could be enforced. If the observer happens to be a decent sort of fellow, and is not hampered by orders from "higher up," he will cheerfully lend assistance should his car run in hard luck. But whether he helps or not is a matter that is left entirely to him, or the "higher up" power, which is, it should be remembered, a hostile or at least not a wholly friendly power.

In the case of four passenger cars it is not of vital importance whether the observer renders assistance or not. Such cars may

and almost certainly will, carry a mechanic for this purpose. The rules say that "except that each car must carry an observer, the number of passengers shall be optional." It is further provided that "one passenger only shall be permitted to render assistance in the matter of repairs."

It will thus be seen that two passenger cars have only the operator and a very doubtful observer to make repairs, while four passenger ones may carry a factory hand for the sole purpose of rendering assistance.

What effect on their showing such a handicap on the runabout type of car will have is problematical. In last year's contest the runabouts carried off the honors, with a considerable margin to spare. But that was an easy run, whereas the approaching one will be just the reverse. The comparative simplicity of the small car renders it much easier to keep in order or to put to rights when it goes wrong. But whether the ratio is sufficiently great to equalize matters is a matter of great doubt, and only the contest itself can set the matter at rest.

### Fire on a Ferry Boat.

Panic caused by fire occurred on the ferryboat Atlantic of the South Ferry line between Manhattan and Brooklyn on Monday. The boat was in midstream. All was excitement. "Full speed ahead" was signalled to the engine room, the whistle shrieked an alarm, and women passengers went into hysterics.

It wasn't an automobile with its gasoline tank on fire. It was a truckload of oakum on the driveway next to the engine room. All the same, passengers were ready to jump overboard. At the ferry slip hose-men stood ready to deluge the boat as soon as it entered.

Some of the newspapers mentioned the matter, but others did not. It wasn't an automobile with its gasoline tank on fire. That would have been a different story. It would have afforded opportunity for a tirade against the danger of fire from gasoline motors. Fire is fire, and the small quantity of gasoline carried in the tank of an automobile is not the only combustible commodity that travels upon the ferryboats plying the waters about the great metropolis.

### Other Points of Excellence.

In all past and projected endurance runs the great desideratum was and is to get there in some sort of fashion. Formerly it

did not matter much how or in what condition; in this year's run condition will play an important part, which is as it should be. No car which does not reach Pittsburg in good order can carry off the highest honors.

But condition, whether at the beginning or end of a run, is not the only thing to be considered. There are other qualities inseparable from a really first class car that are, if of secondary importance, still of great moment, and an integral part of any really comprehensive test of the standing of a car.

One of the chief of these qualities is noiselessness. Who will deny the value of this quality? Let two cars start out on a run and arrive safe at their destinations; one runs smoothly and silently, responsive to the slightest turn of the steering wheel, the swiftest change of the gears; the other rumbles along, with strident, insistent noise from the exhaust, creaking and rattling of the gears, groaning of the springs and other parts, a terror to other users of the road, a nuisance to its occupants. Will any one contend that the former has not made a better run and is not a preferable car?

In British tests these matters are all taken into consideration in determining the rating of competing cars. The elimination of noise is an object much to be desired. To fittingly reward the designer or builder who best combats it, while penalizing him who offends most conspicuously, is both fitting and just. Were it otherwise, did the noisy car receive encomiums equally with the silent one, there would be little incentive to produce cars improved in these respects.

It has been truly observed that noise is nothing more or less than lost or dissipated power. Consequently to lessen noise is to conserve power, as well as to remove one of the great objections to the motor vehicle. When gears grind and shriek it is a certainty that they are working badly—that they are dissipating the power communicated to them by the engine and intended to be conveyed to the driving wheels. A silent gear, on the other hand, denotes its satisfactory working and bears mute testimony to the excellence of design and soundness of workmanship of the car in question.

Let us address ourselves to the minimization if not the entire elimination of noise. Let us put a premium on silence, impose a penalty on noise. The noisy car merits, and sometimes receives, opprobrium, just as the silent one has praise showered upon it. Who has not watched a steam car go by with no sound save the subdued sob of the exhaust,

and compared it with some especially noisy specimen of the gasoline type, to the manifest disadvantage of the latter? If the steamer can demonstrate its equality in other respects it would deserve to, and almost certainly would, win out on this issue alone.

### Rain and the Roads.

It was a frequent subject of remark in the 1902 endurance contest that "if it should rain there would be a different story to tell." Unquestionably it was true, for only with dry roads could the remarkable showing between this city and Boston have been made. Now that we are almost on the eve of another annual contest, the same remark is being made. This time it is felt that exceptionally bad weather may almost ruin the event; and this is, of course, earnestly to be deplored. Many so called roads are temporarily rendered absolutely impassable by violent or continued rains, and all accounts agree that some of them are to be found along the route of the present contest. Therefore anything even remotely resembling a prolonged deluge is to be deprecated.

But is it altogether desirable that good weather should prevail during the entire run? Should the contesting cars not have a taste of the bad along with the good in order to bring out their strong points? Is not the object sought by the contest the selection of the best cars as well as elimination of the poorer and weaker cars, the weeding out of the halt, the lame and the blind? Is it sufficient to say, in effect, that 25 per cent of the starters are equal, that another 25 per cent are but a trifling distance behind and that only 10 or 15 per cent failed to secure certificates for meritorious performances? Would not a greater variance in performances be a better ending?

It may be said that as planned the contest is severe enough, even in good weather. But the point made to us last week by one prospective competitor answers this. "The course is not such a hard one that any really good car cannot get through all right," he said. "The real test will come if bad weather is encountered. Then it will be seen which are thoroughly first class cars and which only fair ones. There is no car that has been used much for touring that has not been put to as severe a test this summer as will be the run to Pittsburg. Many of them have been up against infinitely worse propositions and come through successfully. What we want next month is a test that will include all sorts and conditions

of roads and weather; that will show which are the best cars."

That there is considerable truth in the point is undeniable. At the same time, we should not pray too earnestly for rain, lest we get entirely too much of it. And, besides, we don't have to pray for rain this year.

### A Handicapping Plan.

Another attempt is to be made to devise a workable plan for handicapping racing cars. At the Empire City meet on October 3 the plan will be given a test. A race at five miles, the handicapping being by distance and with a standing start, will be run, the starts being allotted by a committee of three appointed for the purpose. The cylinder bore and stroke, number of cylinders and the ratio of engine shaft and rear wheel revolutions, will all be taken into consideration in making the allotment; and from this basis something feasible ought to be evolved.

The outcome will be awaited with interest. Close contests are the most needed accompaniment of race meets, and no labor is too great to bestow upon the task of bringing them about. The lack of them destroys all interest, once the novelty of automobile speeding has worn off.

An indispensable requisite to the success of the present attempt is the procurement of accurate data. The smallest inaccuracy swells to immense proportions in working out the ultimate figures, and it cannot be too carefully guarded against. Unintentional errors will prove just as serious as intentional ones, hence it will not do to assume too much, even when the assumption is entirely honest.

### Individual Chain Drive's Growth.

In spite of the inroads made upon it by the cardan joint and live rear axle system of transmission, the individual chain drive to the wheels manages to hold its own. What it loses in one direction it gains in another. If it is used on a constantly decreasing number of light and medium weight cars, it retains its lead almost unimpaired on the heavy ones, and is being made use of on other types of vehicles.

It is now found on a very respectable number of steam cars—all of them, of course, heavier vehicles than the runabout. Indeed, it is scarcely going too far to say that, as far as steam touring cars are concerned, the individual chain drive promises to play one

of the most prominent parts. It lends itself remarkably well to the transmission of power on such vehicles, its reliability and effectiveness being undeniable.

Until the present time no attempt has been made to utilize it in connection with electric vehicles. But its merits are such that it could not always be confined to the gasoline car, where it has won its chief victories. It has now made its appearance on an electric business wagon, and if it proves as successful as is anticipated it will be much used in the future. The outcome will be awaited with no small degree of interest.

The average person takes an interest in everything of an unusual nature. The slightest out of the ordinary happening will attract a crowd even in the most sparsely populated section, and each minute adds to the gathering. And in nothing does the curious person take a livelier interest than in an automobile en panne. Every movement of the chauffeur or mecanicien is watched with close attention, and if the seat of trouble is quickly detected and remedied and the car continues on its way keen disappointment is evinced. The onlookers want to learn what "makes the wheels go round," and if this laudable desire is balked they are not unnaturally indignant.

That all gasoline automobiles do not smell vilely is testified to by the fact that one occasionally does. We may pass a score of comparatively inoffensive cars, and then one goes by which perfumes the atmosphere over a wide area, leaving in its wake an odorous trail almost thick enough to cut with a knife. At such times we should reflect upon the vast improvement in this respect that has taken place in the last few years.

Who will deny that the automobile has progressed, now that horsemen recognize it and sometimes welcome it with open arms? It is announced by a horse exchange in this city that a semi-annual auction sale of automobiles will be inaugurated by it in a few weeks. Without forsaking the horse, it will be sidetracked for a brief period and its hated rival given the centre of the stage.

There are signs that President A. R. Shattuck of the Automobile Club of America will seek "vindication" this fall in the form of a nomination for a third term. The campaign slogan in such event will probably be: "Bailey! Petrol! Me! Me! Me!"

## BIG FEAT OF LITTLE OLDS

## Whitman Delivers San Francisco's Message to New York and Goes on to Portland.

At 11 o'clock on last Friday morning a mud stained runabout of the Oldsmobile pattern, with flags flying from each corner of the body, and two weatherbeaten men on the seat in picturesque costume, came panting along Centre street to the plaza in front of the City Hall. A box on the rear bore the legend, "San Francisco to New York," and a policeman stationed at the removable iron posts that guard the entrance to the plaza quickly lifted one of the posts and the little motor carriage of wonderful staying power silently entered, followed by an

who had been notified of the arrival of the couriers and was awaiting them.

In Park Row the fall of a sparrow is taken cognizance of by a crowd, and the unusual appearance of the automobile at once caused to form a crowd of unusual proportions. Whitman, who operated the runabout, whirled it in upon the plaza in a curve, bellying toward the Postoffice, so as to get a "take off" for the two high and broad steps that lead to the wide landing that spreads at the foot of the front steps to the City Hall. Six feet away from the two steps the car was halted, and then started forward again on the slow speed. It was not jumped up the steps, but made to take them slowly and with becoming dignity. First, the front wheels, one step at a time, and then the rear wheels mounted, as if the car was a long bodied quadruped. As an observer remarked, the carriage "just stepped up." A multitu-

Mayor's Office,

San Francisco, July 6, 1903.

Hon. Seth Low, Mayor of New York.

My Dear Mayor: Mr. L. L. Whitman is starting from here at 11 o'clock this morning to make a tour across the continent from San Francisco to New York on an Oldsmobile. San Francisco sends her greetings to the great metropolis of New York.

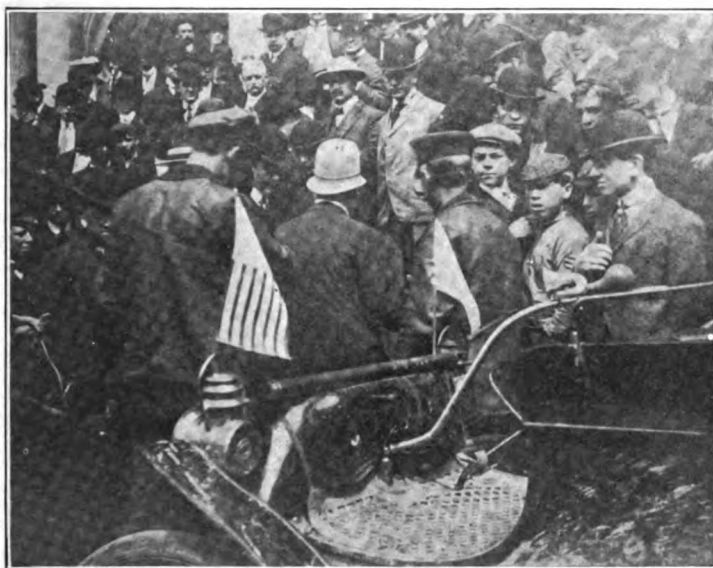
Any courtesy that may be extended to Mr. L. L. Whitman by you will be greatly appreciated by yours very truly.

E. E. SCHMITZ, Mayor.

In reading the letter in a low tone the Mayor stumbled over the word "Oldsmobile," repeating "automobile" after it, as if correcting some obvious error of writing. Then he said:

"I am pleased to receive a message by so novel a method. It is the first message from San Francisco I ever received by auto-

## IN CITY HALL PARK, NEW YORK.



POLICEMAN CLEARING THE WAY.



UNDER THE MAYOR'S WINDOW.

other one, new and shining, that acted as its escort.

The travel stained car was, of course, the regular stock model Oldsmobile of 800 pounds and 5 horsepower, which had just succeeded in following the heavy cars across the rough roads of the continent and completing the journey from the Pacific Ocean to the Atlantic. Its occupants were Lester L. Whitman and E. I. Hammond, of Pasadena, Cal., who left San Francisco in the little car on July 6 last, with a message from Mayor Schmitz of that city to Mayor Low of New York. They had arrived in the metropolis the day before, seventy-three days out from San Francisco, of which time only forty-five and a half days were actually consumed in travelling, the rest of the time having been lost at different stages when the adventurers were stormbound. The escorting car contained G. R. Howell, of the New York Oldsmobile Co.; a newspaper man and a photographer. They were intent upon delivering the message to Mayor Low,

dinously murmured "Ah!" punctuated by a few cheers, expressed the admiration of the crowd as the runabout swung around broadside to the main steps and came to a halt. Messrs. Whitman and Hammond, bronzed as Indians, strikingly garbed in flannel shirts with rolling collars, corduroy trousers, khaki leggins, leather coats and chauffeur caps, became immediately the target for a score of camera snapshots while sitting at ease awaiting the pleasure of the Mayor.

In a few minutes word came from Private Secretary J. B. Reynolds that the Mayor was ready to receive them, and they entered the reception room of the city's executive. They were introduced by Secretary Reynolds to Mayor Low, and Whitman handed to him a large envelope bearing the seal of the San Francisco Mayor and inscribed, "Hon. Seth Low, Mayor of New York City, New York. Courtesy of L. L. Whitman."

Opening the letter the Mayor read the following:

mobile. How long did it take you to get here?"

Whitman responded:

"Seventy-three days have elapsed since we started, but our actual running time was forty-five and a half days."

"And were you much delayed by accidents?"

"We made, of course, some repairs, as all tourists do in even shorter runs, but we had no serious breakdowns."

"Ah! That is excellent. By what route did you come?"

"We made some detours, but, generally speaking, we followed the route of the Southern Pacific to Ogden, the Union Pacific to Omaha, the Northwestern to Chicago, and then the Lake Shore, New York Central and Hudson River route."

"I am pleased to see you and congratulate you."

Mayor Low then yielded to the requests of the reporters for the letter from Mayor Schmitz, and, handing it to the Motor World

representative, said, pointing his finger at the word "Oldsmobile": "That evidently is a typographical error. It should be 'automobile,' I take it."

"Oh, no. That is the trade name of this particular automobile," explained the Motor World man.

The Mayor smiled and remarked as he passed on: "I have much to learn yet about automobiles."

So was completed the mission of the two plucky travellers in delivering the message from the Pacific Coast metropolis to the Empire City on the Atlantic Seaboard, but this did not terminate the trip of tremendous length and roughness which the confident pair had undertaken. Their design was to make the longest continuous run from point to point ever accomplished in the United States, and Portland, Me., was their ultimate objective point. The next morning, therefore, they left the Oldsmobile garage in Thirty-eighth street and set out for the run through New England. They arrived at Portland on Tuesday night, completing the distance of nearly 4,700 miles in seventy-eight days from time of starting, or forty-eight and a half days of actual running time. The pair arrived in Boston on Monday morning and left there Tuesday morning.

The trip of the Oldsmobile tourists into New York was finished in a driving rainstorm on last Thursday evening. This made the third automobile that had succeeded in crossing the continent under its own power, and yet in some respects it was the most wonderful performance of the three. Looking at the dapper little car, it was hard to believe that it had braved all the hardships of the great alkali deserts, with their almost imperceptible trails through the sagebrush, leading across the dead watercourses, washouts and steep sand hills, the terrible roads of the Rockies, the binding sinkholes of gumbo mud and the rutty, rock strewn roads of the great farming States. There was scarcely a mark on the car to tell of mishap—no dents or missing pieces, but only a few signs of wear and travel through mud and dust. The wheels looked strong and true, and the tires good for many hundreds of miles; albeit a few spokes needed tightening and there was a reinforcing patch on one of the steel rims. The chain ran sweetly and the engine pulsed rhythmically, though a bit of repairing with wire showed where a gasket of the muffler had been broken. The springs and axles, untouched, stood stanch as at the start, though a couple of the small steering lever springs had broken and been replaced. The most remarkable feature about the trip was the experience of the tourists with their tires. Diamond tires were used, and in the whole journey only two punctures were sustained. One of these occurred west of Denver, but the other three tires were not even pumped up in that first stage of nearly 1,000 miles. The first new tire was put on at Omaha, the second at Chicago, and two more at Detroit. The first tire put on replaced a punctured one that had been run on flat and prac-

tically ruined, but the other three can all be repaired. The second set of tires all were in prime condition when the car reached New York. In figuring out the tire cost of the trip, it was found that it was 1.6 cents a mile. These statements and the condition of the tires and the whole car caused every one to marvel.

On the day of the arrival of the travellers G. R. Howell went up to Yonkers to meet them, but arrived at the hotel there only to learn that they had left. He started in pursuit, and on Jerome avenue, near the Seventh avenue bridge, he came in sight of them. The men who had travelled more than 4,000 miles were too quick, however, and got away and were lost to sight again in the city streets.

As has been intimated, the last stage of

### THE MEN WHO DID IT.



L. L. WHITMAN.

E. I. HAMMOND.

the big journey was made in a terrific gale and rainstorm.

Wednesday night was spent in Poughkeepsie, and the noonday stop on Thursday was at Yonkers. Central Bridge was crossed at 3:30 o'clock in the afternoon, the tourists then going over to Riverside Drive and ending the day's run at the garage in West Sixtieth street.

The journey was entered upon more as a pleasure and sightseeing tour than as an attempt to make records. Both tourists are automobile enthusiasts, who believed they could cross the continent in a light vehicle.

By the route they followed they estimate the distance travelled at between 4,200 and 5,000 miles. To Ogden they covered practically the same route as taken in E. T. Fetch's record ride, and at Omaha they came on the trail of Dr. Jackson's car, which they followed most of the way to Chicago.

The highest altitude they reached was 8,000 feet, in the Sierra Nevada. For the sand they covered the tires of the wheels with canvas.

For nine days they were held up in Omaha

by a flood, while heavy rains detained them six additional days in other parts of Nebraska. From Omaha the trip to New York was made in eleven and a half days, which established a record between those points.

The worst roads were encountered in the run to Denver, which occupied thirty-one days to reach. Rain was met with almost daily on the stage between Denver and Omaha, and after the delay in the latter city the first actual good running time was begun.

From Omaha to Chicago was made in four days, from Chicago to Detroit in two, and from Detroit to New York in five and a half days. The best roads of the trip were ridden over in Indiana and in the Province of Ontario, Canada, between Windsor and Niagara Falls. The most difficult roads were in Nevada and Wyoming.

Many amusing experiences were related by the tourists. When lost near Granger, in the Wyoming Desert, a pack of coyotes howled around them all night. They built a fire of sagebrush and one sat up and watched while the other slept. Near Battle Mountain they came suddenly upon a lone Indian tending a camp fire at dusk. The Indian gave a frightened glance at the horseless carriage and disappeared with a yell of terror.

Cowboys came to their assistance on one occasion in the nick of time. The car had ploughed deep into a sand drift. Night was coming on fast, and the automobilists had many miles to go in order to reach the nearest shelter. They had begun to slowly extricate the machine when a party of plainsmen hove in sight and promptly aided them. The cowboys roped the car, and their horses soon had the automobile out of the drift.

Hammond was the snake killer of the party. He estimates that he killed at least twenty of them during the trip.

The pair could plainly see the trail left by the Packard machine, which had preceded them two weeks before, and they followed this trail for many miles.

They carried an army canteen filled with a gallon of water across the desert, and only on one occasion did they run short. They were approaching Kelton, Utah, and saw ahead of them a building at which they thought they would get water, so they emptied what was in the canteen into the engine water tank. When they reached the building they found it deserted and not a drop of water to be had.

The points passed through on the trip were Sacramento and Placerville, Cal.; Carson Reno, Wadsworth, Winnemucca, Elko and Wells, Nev.; Ogden, Utah; Rawlins and Laramie, Wyo.; Fort Collins, Denver, and Julesburg, Col.; Elwood, Mind n, Hastings, Lincoln, Ashland and Omaha, Neb.; Council Bluffs, Des Moines, Cedar Rapids and Mechanicsville, Iowa; Sterling and Chicago, Ill.; Hammond, Ind.; Toledo, Ohio, Detroit, Mich.; Windsor, London, Brantford, Hamilton and St. Catherine, Ontario, and Niagara Falls, Lockport, Rochester, Syracuse, Utica, Albany, and Poughkeepsie, New York State.

Whitman, who is an automobile dealer in Pasadena, Cal., said he would not repeat the trip for \$100 a day. Hammond was not so positive, intimating a desire to return to the Coast even though in an auto as he came.

Whitman suffered a loss of twenty pounds in weight on the trip. Hammond lost fifteen pounds.

## RACE MEET AT PROVIDENCE

### Big Attendance at Narragansett Park and a Series of Well Contested Events.

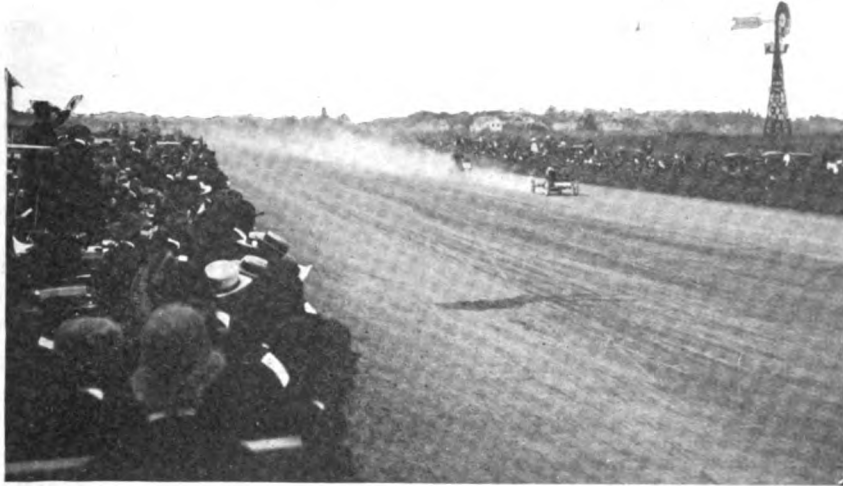
Every highway leading to Providence, R. I., was thronged with automobiles on Saturday during several hours preceding the

which opened with a five-mile race for motor bicycles, was an attractive one, and several of the races were of the highest order. As a special event Charles Schmidt, on the "Gray Wolf," went an exhibition five miles in 5:32. George C. Cannon also went a mile for a record, but could do no better than 1:07. The officials of the meet, in addition to Mr. Peck, included Dr. Julian A. Chase,

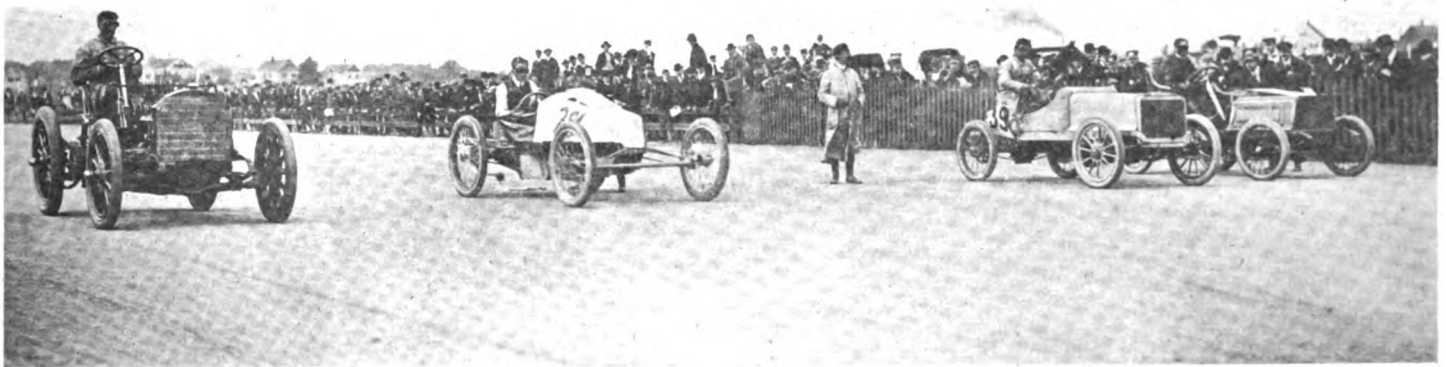
president of the American Automobile Association, referee, and B. H. Deming, Henry Fosdick and Colonel James T. Soutter, judges.

While fast time was made in several of the contests, no records were broken. Among the prominent owners who appeared was Alfred G. Vanderbilt, who entered a Mercedes, driven by Paul Satorl, and won third money in the ten-mile open. The same machine qualified in a trial test for the five-mile race for 1,800 pound cars, but was hopelessly beaten in the finals.

In the match race between Page, La Roche and Schmidt, the former got the lead at the start, but at the backstretch La Roche went up on the outside, passing the Frenchman. Schmidt came up to second position. In the second mile Schmidt came down the stretch abreast of La Roche, with Page hanging to them, and at the turn from the home La Roche gained on Page. As they turned into the homestretch on the fourth mile the three were abreast. Leaving the homestretch, La Roche took the pole, Page dashed into second, Schmidt taking the third position. Rounding the turn into the homestretch, Schmidt passed Page, but he could not do more than come abreast of La Roche.



CANNON WINNING RACE FOR STEAM CARS.



START OF RACE FOR ALL POWERS.

hour announced for the third annual race meet of the Rhode Island Automobile Club at Narragansett Park. The attendance was a flattering one, and included representatives of the fashionable element of Newport, Narragansett, New York, Providence, Lenox and Boston. There were between 7,000 and 8,000 people present. The grandstand was well filled, and along the rail on each side of the track were about one thousand automobiles, representing almost every known make of vehicle, American and foreign. Many of the people best known in the automobile world were among the attendants, and the day, with perfect weather conditions for both racers and spectators, was one of keen enjoyment.

Neither mishap nor failure marred the occasion, and much credit was given to Starter A. D. Peck, who kept the clerk of the course busy and permitted no delays. The card,



F. A. LA ROCHE CAPTURES FIVE MILE OPEN RACE.



who won by half a length, with Schmidt second.

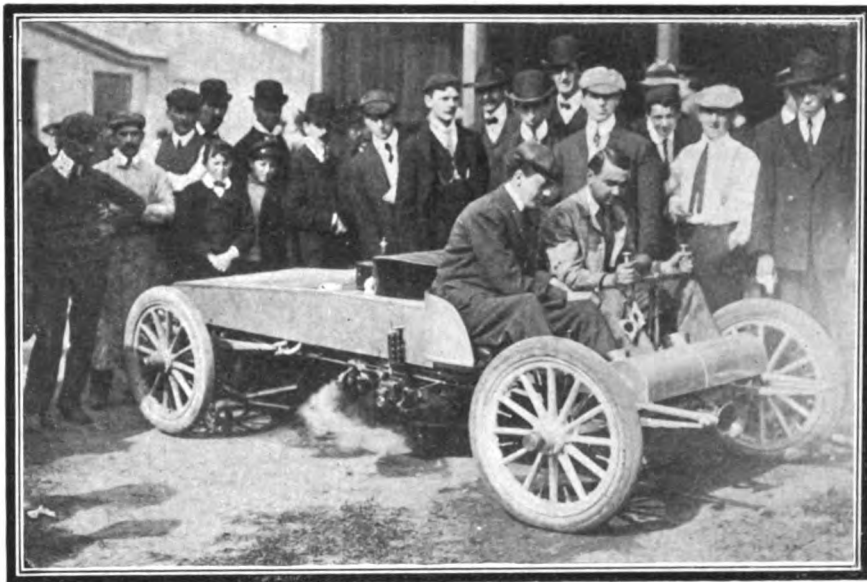
There were only two actual starters in the five-mile race for gasoline cars weighing 1,200 pounds and under. A. R. Bangs jumped

and Ross had the leading positions, while Cannon and his new so-called flying machine was pocketed in third position. In the first mile the machines got strung out, and as they made the turn into the home-

as close to Cannon as safety permitted all the way to the bell. Even then the "little low down machine" of the Harvard student could not seemingly get away, for Ross trailed him all the way home, being only forty yards to the bad when the tape was crossed. Durban, Ross's running mate, finished third.

F. A. La Roche and Henri Page were the only men to appear for the start in the first heat of the class for all motive powers for cars weighing under 1,800 pounds. The men got a good fair start, La Roche immediately opening up a gap of twenty yards. The first mile was ridden in 1:09 2-5. At each turn Page came up abreast of La Roche, but just as soon as the stretches were reached La Roche would always regain his lost distance. In the fifth mile La Roche opened up an additional ten yards on Page, who again closed the distance, and at the finish was all but up on even terms with the New Yorker. It was as close and hotly fought a contest as was ever witnessed on the automobile track, as shown by the times of four of the miles, as follows: 1:05 1-5, 1:05 2-5, 1:05 2-5, 1:05 1-5.

In the second heat Raffalovich, Cannon, Paul Satori, on A. G. Vanderbilt's Mercedes; Schmidt and Snow were the starters. Schmidt got the lead at the start, followed by Satori, Ross, Snow, Cannon and Raffal-



THE CANNON STEAM CAR.

right away from L. H. Roberts, while W. E. Eldridge failed to get started. Bangs ran right away from his opponent, winning by one and one-half miles. All entries save those of H. H. Rice and A. J. Feltham were withdrawn in the electric class, and the latter won with ease.

The five-mile invitation race for Peerless cars, with owners driving, brought out five contestants. H. Emmet Rogers soon took the lead, while A. E. Bradley pushed his way up to second position, and Edward Hylan took third position. E. Ray Speare surrendered the position of honor in the rear to R. M. Garfield. Rogers gained yards on his opponents on each lap, winning by almost half a lap, while Ed. Hylan had 100 yards over E. Ray Speare.

Six cars battled in the three-mile for steam vehicles, all weights. At the start Marriott

stretch on the first lap Cannon came out from the ruck and went up on the outside



ALFRED G. VANDERBILT'S STRIPPED MERCEDES.

like a flash and took the pole. Ross passed Marriott and trailed Cannon. Ross hung

ovich. On the first mile Schmidt opened up 100 yards on Satori, both of these machines running away from the field, and at two miles Schmidt had a quarter of a lap on Satori, who led the others by 250 yards. At this time Cannon went by Ross, who led Snow by a considerable distance, while Raffalovich was away in the rear. In the fourth mile Schmidt overhauled Raffalovich, and then Snow, and in his last mile scored a full lap on every one save Satori, he catching Cannon right on the tape, Satori then being three-quarters of a lap to the bad.

In the final heat all qualifiers save Cannon started. La Roche took the lead, Page came next, Satori went into third and Schmidt in fourth position. In the first mile La Roche gained twenty yards on Page, who led the others by about 100 yards, Schmidt having passed Satori. Page, on the second mile, gained on La Roche, and on the turn from the home went right by, taking the pole, and the race was now between these two. Once to the fore Page and Schmidt gained



AN ADVANTAGEOUS VIEW POINT.

on La Roche. At four miles Page had 100 yards on La Roche, who in turn had that on Schmidt, and the race finished in that order.

The final event was at the ten-mile distance for all motive powers and all weights. Page took the lead, followed by Satori, La Roche, Schmidt, Snow, Raffalovich and Bowden far in the rear. On the backstretch Schmidt went by Satori and La Roche, and it was another fight between Page and Schmidt, who drew away from the field. At three miles Page went by Bowden and Raffalovich and passed Snow in the fourth mile. Schmidt at this time was about a quarter of a mile behind the leader. Satori was in third position a mile behind Page, who overhauled him at six miles. Page had everything his own way in this contest, and at seven miles was after Schmidt, the only man he had up to this time failed to gain a lap on. Schmidt, however, was able to hold Page down to his half-mile advantage, which margin separated them at the finish. Satori finished third. Following is the summary:

Five-mile race for motor bicycles—Won by J. Derochier (Metz); James Myers (Orient), second; Walter J. Zeigler (Columbia), third. Time, 6:14.

Five-mile race for gasoline cars, 1,200 pounds and under—Won by A. R. Bangs (Franklin), Boston; L. H. Roberts (Buckboard), Boston, second. Time, 6:25 2-5.

Three-mile race for steam carriages—Won by George C. Cannon (Cannon), Boston; Louis S. Ross (Stanley), Boston, second; Frank Durbin (Stanley), Boston, third. Time, 3:49 4-5.

Five-mile race for electric carriages—Won by A. J. Feltham (Waverley); H. H. Rice (Waverley), second. Time, 4:48 4-5.

Five-mile race for cars of all motive powers—First heat won by F. A. La Roche (Darracq), New York; Henri Page (Decauville), Paris, second; time, 5:30 1-5. Second heat won by Charles Schmidt (Packard); Paul Satori (A. G. Vanderbilt's Mercedes), second; George C. Cannon (Cannon), third; time, 5:35 4-5. Final heat won by Henri Page (Decauville); F. A. La Roche (Darracq), second; Charles Schmidt (Packard) third. Time, 5:28 4-5.

Invitation five-mile race for Peerless cars—Won by H. Emmet Rogers, Boston; Edward Hylan, Lowell, Mass., second; E. Ray Speare, Boston, third. Time, 8:18.

Five-mile match race—Won by F. A. La Roche (Darracq); Charles Schmidt (Packard), second. Time, 5:32 1-5.

Ten-mile race for cars of all motive powers—Won by Henri Page (Decauville); Charles Schmidt (Packard), second; Paul Satori (A. G. Vanderbilt's Mercedes), third. Time, 10:42 2-5.

### To Try Automobile Racing.

"Bobby" Walthour, the well-known cycle racing man, is said to be contemplating entering the automobile field. He has extracted about all the gold and glory possible from the cycle game, and regards the automobile as a vehicle for further work in this line.

## PATERSON CELEBRATES

### Has a Race Meet in Conjunction With Carnival —Seven Events Contested.

Seven events constituted the card for the automobile races at the old Clifton racetrack, which were the big feature of Friday in the week's carnival held by the business men of Paterson, N. J., September 7 to 12. F. W. Stockbridge had charge of the matter, and the programme was carried out smoothly. There was a large crowd present. Nearly every race was close.

The first race was between four Oldsmobiles, in charge of Bamford, Rusling, Norwood and Beatty. Bamford won the race by about three lengths. The time was 2:41.

The second event was a trial against time by D. M. Shanley, of Newark. He covered the mile in 1:48.

The third event was between the Oldsmobiles, and Bamford again finished first, but Norwood beat Rusling for second place, the latter getting second in the first race.

The fourth event was between cars of a different type. Foley, of Passaic, with a Prescott, won the race in 1:47½. Van Sickle, with an auto-car, was a poor second. Fletcher's Darracq car was third.

The fifth event was another race against time by D. M. Shanley, of Newark. In this event Shanley covered the mile in 1:46½. Hoff, of Paterson, with a Prescott machine, then covered a mile against time in 1:48.

The sixth event was a race between Van Sickle in an auto-car and Fletcher in a Darracq. The latter won by three lengths in 2:06.

The seventh race was between Shanley, of Newark, and Hoff, in a Prescott car. The latter won by a length in 1:47½. The eighth and last event was between two Prescotts, and was the best race of the day. The machine in charge of Foley won, although Hoff's machine led for half a mile. The time was 1:43.

### Wanted too Many Guarantees.

Chicago is not to have the two days of automobile racing which had been planned by the Chicago Automobile Club as one of the big incidents of the centennial celebration in that city. The club has been up against it in more ways than one ever since the matter was broached. In the first place, the dates selected had to be changed in order to get the sanction of the American Automobile Association. September 28 and 29 were the dates finally settled upon.

Now a larger trouble has appeared, with the result of side-tracking the entire business. The races were to be held at Washington Park, and arrangements had progressed so far that a bond for \$50,000 had been given to the Washington Park Club to insure it against loss through damage to the property. A further demand of a

bond of \$50,000, to insure the owners of the park against liability in case of accident, has just been made, and, in the face of this obstacle the Automobile Club has concluded that it does not care to carry the project any further. Accordingly, the races have been declared off.

### Seats Over the Engine.

The fitting of an extra seat to a car is not at all unusual, and one sees plenty of steam and even gasoline cars with such seats placed in front of the operator's seat and made to do duty when extra passengers are carried. With gasoline cars having the engine in front, however, this arrangement is rarely met with. On Broadway last week, however, just such a car was noticed. It was a small, two-passenger car, with a single-cylinder upright engine, covered with the regulation bonnet. A seat designed to accommodate two persons had been built over the engine and parallel with the rear seat. One would think that its occupants would be anything but comfortable, seated directly over the hot, throbbing engine, and that the seat must be used only in emergencies.

### Drove 500 Miles Without Stopping.

Loxton Hunter, a well known London chauffeur and member of the English Automobile Club, won a singular bet, which was that he would travel a distance of more than five hundred miles without once stopping his motor.

He quitted London at 9 o'clock on Tuesday morning, Sept. 8, with his challenger seated beside him on his automobile. On Wednesday evening Mr. Hunter arrived at Inverness, Scotland, without having once halted or taken a single instant's rest on the way.

The distance covered was 588 miles, so that he largely won his bet. The average pace during the trial was fifteen miles an hour, the roads being in many places very bad.

### Some Big Mileages.

Seventeen thousand miles without outlay for renewals is the remarkable claim put forth by a British motorist on behalf of his car. This does not, of course, include tires. Another user claims 15,000 miles without cost for repairs, and several over 10,000 miles.

### Meet at Brighton Beach.

The American Automobile Association has sanctioned a race meet to be given by the Long Island Automobile Club at Brighton Beach Oct. 31. Sanction has also been granted for a meet at Buffalo on Oct. 10.

### Austria in Cup Competition.

The Austrian Automobile Club sent to the German Automobile Club on Wednesday a notification of its intention to participate in the international cup race next year. Three Wiener-Neustadt cars will be entered.

## MANUFACTURERS APPROVE

### Agreement of Tire Makers Deemed a Step in the Right Direction.

The agreement between the makers of detachable tires to compel makers to stop using tires too light, to insure proper rims being made and to make new prices of their own—the story of which was told exclusively in the *Motor World* last week—has been well received, on the whole, by the automobile manufacturers. Scarcely anyone can be found who disapproves of it.

George H. Day, of the Electric Vehicle Company, when questioned regarding it, said:

"The move is all right, and generally has been well received, because it is realized that it is for the best interests of the tire makers, the automobile manufacturers and the public. It will be better for all to have better tires, even though they cost more. The use of a poor quality of tires and of tires too light for the weight of the cars was inflicting a serious injury upon the industry."

W. D. Gash, of the Searchmont Company, said: "There is no denying the fact that American tires have not been made up to the quality of European tires. The foreign tires have been much more serviceable. There is a demand for better quality in American tires, and when, through ignorance or otherwise, manufacturers have fitted lighter tires than required the need for something to be done became stronger than ever. While this action of the tire makers may not remedy the whole trouble, I think it is a step in the right direction. The point is just here: A manufacturer builds a car for two or three thousand dollars that is equal to going two or three hundred miles without any fussing, but of what use is that when the buyer starts out and, in twenty-five miles, has tire trouble? Yes, it is a step in the right direction. I believe there will be no trouble about the increased cost. Every one will be willing to pay more to have more serviceable tires."

### Judgment Against Syracuse Concern.

A judgment secured against the Central City Automobile Co., Syracuse, N. Y., by George W. and Edward Frick formed the basis of a motion made last week to sequester the property of the judgment debtor. The amount of judgment is \$70, and the papers in the motion set up that there are other judgments against the company. For this reason a temporary injunction was issued by the court restraining the other creditors from commencing any proceedings which will in any way affect the rights of the Frick brothers.

Accompanying the moving papers in the argument was the affidavit of George W. Frick, stating that he desired to sequester the property of the company on the ground

that it is an insolvent corporation. It is also claimed that on another judgment, secured by John G. Garrett, an execution has already been issued. The proceedings were commenced to restrain other creditors from interfering.

### To go for Track Records.

The White steam automobile which made new records at Cleveland a few weeks ago is to be sent for the ten-mile figures at the Empire City track's automobile meet on October 3. This is one of the few steam machines that can travel ten miles at extreme speed.

The management of the Empire meeting has scheduled two special classes—one for 16 h. p. gasoline Locomobiles at five miles and another event at the same distance for Columbia gasoline machines. There are seven entries for each race.

### Severe Test for Trucks.

The capabilities of the six ton Herschmann steam truck were well tested last week, when it was sent by its makers, the Columbia Engineering Works, Brooklyn, to Plainfield, N. J., with a heavy load. The distance covered was more than sixty miles. The next time this trip is made it is expected to make the journey each way in eight hours on a consumption of about 90 cents' worth of coal.

### Chaney Sells Out.

Ambrose Chaney, vice-president and general manager of the Chaney Automobile Co., Terre Haute, Ind., has sold his interest, and is planning to leave Terre Haute and start a similar company in another city. A new manager will be elected in his place.

### Adds Automobiles to Locomotives.

It is announced that the Prouty-Pierce Locomotive Mfg. Co., Kansas City, Mo., will embark upon the manufacture of automobiles. The concern is of recent formation, and is building a large plant at Armourdale, a suburb of Kansas City.

### Geared to Legal Limit.

Jarrott & Letts, the English agents for the Oldsmobile, have ordered all their Oldsmobiles built with gearing of such a ratio that, while they will run well up to the new legal limit of twenty miles an hour, they cannot exceed it.

### New Davenport Company.

The Stoltenburg & Reimers Co. has been formed at Davenport, Ia., and will manufacture, repair and sell automobiles. The capital stock is \$5,000.

A \$200,000 company is reported to have been formed at Shelbyville, Ind., to manufacture automobiles. The stock is said to have been all subscribed.

The Cadillac car is being sold in Omaha, Neb., by the Andersen-Millard Co.

## QUICK INSPECTION TOUR

### Brooklyn Street Cleaning Officials Make Record-Breaking Trip in Automobile.

Several officials of the New York Street Cleaning Department made a tour of inspection last week, traveling in an automobile. They were Superintendent Clarke of Brooklyn Borough and Captain Gibson and Dr. Wallace of Manhattan. A thorough inspection was made. The start was made from Borough Hall shortly after 8 o'clock in the morning, and the party went to the Eastern District, where the inspection of Stable D, Kent avenue and Thirteenth street, was soon completed. A long ride to Jamaica avenue and Gillen Place in East New York followed, and after Stable E was inspected the party arrived at the stable located on Nosstrand avenue, near the Penitentiary hill, but not before a few short stops had been made on the way down. The chauffeur now sped the big machine along the Ocean Boulevard to Coney Island, and from there to Bensonhurst. The inspection of two stables in South Brooklyn followed, completing the tour.

"I arrived in my office at 12:55," said Superintendent Clarke when asked about the trip. "Remarkable time when one considers the territory covered and the length of time spent at the various stations. None of our party expected such quick work, or there would have been a number of watches out timing the delays and the speed between stops. On the next inspection I intend to time the trip myself."

"The ride," he concluded, "goes to show the superiority of the automobile over the horse. If we had made the journey by the old method of carriage riding I doubt very much as to whether we would have been through at 8 o'clock in the evening."

### Wants Only a Site.

The Toledo (O.) Chamber of Commerce has been approached by the Union Terminal Co. of this city on behalf of a client who seeks a location for an automobile factory. The company "indicates that no local financial aid was required other than a good site."

### Springfield Tradesmen Shift.

Whitten & Cameron, Springfield, Mass., have dissolved partnership, C. E. A. Cameron retiring from the firm. J. E. Whitten and E. R. Clark have formed a partnership, and will continue the automobile business at 280 Worthington street and 157 Dwight street.

### Devine Gets Back.

Joseph Devine, of the National Battery Co., who has been abroad for some time in the interests of that company, has just returned to Buffalo.

## FOR BAY STATE MOTORISTS

## The Two Certificates They Must Carry, and Their Intimate Personal Details.

Since September 1. when the new Massachusetts automobile law went into effect, no well posted motorist ventures into that State without being provided with the two certificates here shown. One covers the auto-

ber, method of power, propulsion, horsepower and color are noted on the certificate. The latter also contains an extract from the law, showing how the license number and the number on the lamps shall be displayed, together with the size of the latter.

Altogether the system bears a strong resemblance to that in vogue where rogues are concerned. Presumably Massachusetts motorists are to be congratulated on the fact that they are not photographed and made to

## MORE THAN FOUR THOUSAND

## Is the Estimated Number of Motorists in Massachusetts—Permits for Parks.

Slightly more than 4,000 is the revised estimate of the number of automobiles owned in Massachusetts. Previous to the passage of the automobile law it was thought that the number would reach 5,000, but the registration has shown that estimate to be too high.

Up to Saturday, Sept. 19, the highway commission had granted 3,806 licenses to individuals to run automobiles or motorcycles in Massachusetts, and had issued 3,201 licenses or numbers for motor vehicles. This includes about 350 motorcycles. The rush is practically over at the highway commission office, but there are a few applications for licenses coming in each day, most of which, however, are changes.

So far there has been very little trouble reported to the highway commission. There have been no arrests reported for people running motor vehicles without a license and number. One source of trouble with some automobilists seems to be on the bridges around Boston. Some people do not understand the laws governing the running of vehicles on these bridges. The "law of the road" is:

"When persons meet on a bridge or way, traveling with carriages, wagons, carts, sleds, sleighs, bicycles or other vehicles, each shall seasonably drive his carriage or other vehicle to the right of the middle of the traveled part of such bridge or way, so that their respective carriages or other vehicles may pass without interference.

"The driver of a carriage or other vehicle traveling in the same direction shall drive to the left of the middle of the traveled part of a bridge or way; and if it is of sufficient width for the two vehicles to pass the driver of the leading one shall not wilfully obstruct the other."

Some people do not yet seem to comprehend the fact that "motor vehicles in the Boston parks are required to have permits from the Board of Park Commissioners," and are subject to the park rules governing vehicles. A motor vehicle for pleasure travel "can be used only between 8 p. m. and 11:30 a. m., except on Commonwealth avenue, Audubon Road west of Brookline avenue, Bellevue Road, Glen Lane, Forest Hills Road or a side road of Arborway, or in going by the shortest route to the nearest public way to take a person to or from a house on a parkway.

"A motor vehicle for carrying merchandise shall be used only on Glen Lane, Forest Hills Road or Bellevue Road, or in going by the shortest route to the nearest public way to take merchandise to or from a place in the reservation in which the vehicle is being used."



Commonwealth of Massachusetts

## Massachusetts Highway Commission

20 PEMBERTON SQUARE, BOSTON

## MASSACHUSETTS AUTOMOBILE REGISTER No. 394

This certifies that an automobile owned by or under the control of Henry G. Fisk, residing at No. 367 Union Street, Springfield, Mass., has this day been registered in accordance with the provisions of chapter 473 of the Acts of 1903.

## DESCRIPTION OF MACHINE.

Type of machine, Runabout; Name of maker, J. Stevens Arms & Tool Co.; Maker's number, 110; Character of motor power, Gasoline; Horse power, 8 1/2; Predominating color, Black.

The register number, which will be furnished by the Massachusetts Highway Commission, shall be displayed at the front and back of the vehicle in conspicuous places so as to be always plainly visible.

The automobile shall carry two lamps showing white lights visible at least two hundred feet in the direction toward which the vehicle is proceeding. The register number shall be displayed on the sides or fronts of said lamps, in such a manner as to be plainly visible when the lamps are lighted. The figures are to be in Arabic numerals not less than one (1) inch in height.

Date August 4, 1903.

Countersigned: A. Brecher Secretary.

Not valid unless countersigned.

W. E. Mc Clement  
Harold Parker  
John H. Manning  
Massachusetts Highway Commission.

mobile, the other its operator, and each is described in a manner to leave no doubt of identification.

The form of the operator's license appears

carry the counterfeit presentment of themselves along with their license number, so that it could be used as evidence against them in case of need.



Commonwealth of Massachusetts

## Massachusetts Highway Commission

20 PEMBERTON SQUARE, BOSTON

## MASSACHUSETTS AUTOMOBILE REGISTER. OPERATOR'S LICENSE No. 238

This Certifies that Harry G. Fisk, residing at No. 367 Union Street, Springfield, Mass., has this day been licensed to operate an automobile or motor cycle in accordance with the provisions of chapter 473 of the Acts of 1903.

## Description of Person Licensed.

Date of birth, May 5, 1873; Sex, male; Height, 5 ft., 9 1/2 inches;

Weight, 150 lbs.; Color of hair, Brown; Color of eyes, Brown

Date July 29, 1903.

Countersigned: A. Brecher Secretary.

Not valid unless countersigned.

W. E. Mc Clement  
Harold Parker  
John H. Manning  
Massachusetts Highway Commission.

to have been modelled after that framed for dogs. The applicant is required to give the date of birth, and to state the sex, height, weight and color of the hair and eyes, and these details being forthcoming, and the other requirements having been fulfilled, the license is granted. In the case of the car searching questions are also put. The type of car, name of maker and maker's num-

## Does Work of Six Horses.

Bournemouth, England, has an automobile watering cart. The hills are high thereabouts and it has been necessary for the authorities to furnish six horses for the cart before the automobile principle was invoked. The Bournemouth watering cart tank carries four tons of water. On steep grades this is a heavy pull for horses. The automobile handles it easily.

## EXEMPTS SIGNAL CORPS CAR

**Washington Commissioners Permit it to Perambulate Without Number or Licenses.**

There will be one instance of exemption from examination and license in the operation of automobiles under the new Washington (D. C.) automobile regulations, which have been promulgated by the District Commissioners and which are now in effect. This was recommended to the Commissioners by Commissioner West last week, and was in response to a request received recently from Major George P. Scriven, Acting Chief Signal Officer of the United States Signal Corps. Commissioner West addressed Major Scriven before the new regulations went into effect, asking to be made acquainted with the facts relative to the fact that under present army regulations the commanding officer of the Signal Corps post located at Fort Myer, Va., has occasion at times to send a military automobile, in the performance of public duty, into the city of Washington and other points.

"This automobile," stated Major Scriven, "which passes through Washington on the way to Fort Washington, Md., is run sometimes by one enlisted man of the Signal Corps and sometimes by another, there being a number of competent men. It is not presumed that the Commissioners intended that the automobile ordinance, which, by general consensus of public opinion, is necessary for the public safety, should be so construed as to be practically prohibitory to the use of automobiles for military purposes by the army of the United States, which would be the case if every enlisted man was obliged to obtain a certificate of his competency from every municipality.

"It is proper and desirable, save on the occasions of the gravest public emergencies, that reasonable speed and other regulations of municipalities should be conformed to by the army. It is evident, however, that it would be tantamount to forbidding the use of such vehicles by the army if every chauffeur or driver was required to submit to municipal examination.

"The Signal Corps automobile is regularly used not only in the District of Columbia but in Alexandria and other corporate towns while repairing the military telegraph lines to Fort Washington and in performing other public duties. These machines were likewise used at New London, Conn., and other points in New England last year, at Fort Riley, Kan., and this year at Portland, Me. Should the drivers of these machines, who are enlisted men and subject to change from day to day, be liable to arrest for nonconformity with municipal regulations? As to identification, it is to be said that the Signal Corps machines

have the designating Signal Corps device, so that identification is easy."

After a consideration of the excellent reason set forth by the officer, Commissioner West recommended to his associates the adoption of the following order, which was done: "That military automobiles in the performance of public military duty, operating in the District of Columbia, to and from Fort Myer, Va., and other military posts, when operated by members of the Signal Corps who have been completely instructed in the operation of said automobiles, be exempted from the provisions of article 24 of the police regulations concerning automobiles in the District, so far as said regulations direct the numbering of machines and the licensing of operators."

## Bailey Law Again Attacked.

Once more the constitutionality of the Bailey law is attacked, this time at Syracuse. The case is that of Albert E. Ballou against the H. H. Franklin Mfg. Co. for injuries received in being run down by an automobile while upon a bicycle. The action was brought some time ago in the Syracuse Municipal Court for \$1,000 damages for the accident, which happened at Salina and Temple streets. The defendant's machine was being operated by an employee, and the first answer was a denial and an allegation of contributory negligence.

Now comes the amended answer, that urges that Sections 163, 166 and 169A of the Highway law, as amended by Chapter 625 of the Laws of 1903, referred to in the complaint, is unconstitutional. The answer states that the law has already been found unconstitutional in the City Court of New York.

The sections referred to are those relating to the fixing of speed, the registration of automobiles, the stopping of cars on signal and the licensing of automobiles.

## Indiana Court Upholds Automobile's Right.

The automobile has won its first victory in the courts of Indiana. The county judge at Sullivan County was recently called upon to decide just what rights the automobilist has on the public highways of that county, thereby setting a legal precedent for the rest of the State. The case was a suit for damages brought by Homer Trimble against Dr. George Pirtle, at the passing of whose automobile Trimble's horse had become frightened and smashed the buggy to which it was hitched. The rights of all automobilists in the State were involved, for the litigation raised the question whether the horse, having antedated the automobile by several centuries, had any greater rights on the county roads than his mechanical rival. Trimble's attorney contended that this was the case, but the judge decided differently. The court's ruling was that the automobile had as much right on the roadway as the horse, and that it was Trimble's own concern if his steed did not behave as it should. The suit was dismissed at the expense of the plaintiff.

## ALMOST 10,000 POINTS

**Is Maximum Score of Cars in British Trials—How They are Apportioned.**

In the British 1,000-mile trials, now in progress, the highest number of points a car can score is 9,839½. But the possibility that any car will come out with a perfect score is so remote as to be scarcely worth considering, so elaborate is the method of computation and so severe the conditions. Of the nearly 10,000 marks, only 2,652 are awarded for reliability—that is, for the work of the car on the daily runs. The remaining 7,000 odd go for a variety of items, that for "adjusting, cleaning and replenishing" being the most important, viewed from the point standard. Condition after trial, brake and steering efficiency, noiselessness and the absence of vibration, vapor or smoke and dust being among the items in which a car may excel.

The system of marking is shown by the following table, giving the maximum number of marks obtainable:

	Marks.
Reliability .....	2,652
Adjusting, cleaning and replenishing .....	1,312½
Hill-climbing .....	1,000
Condition after trial .....	1,000
Tests of brake-power .....	250
Efficiency of steering gear .....	250
For absence of noise .....	250
For absence of vibration .....	250
For absence of vapor or smoke .....	250
For absence of dust-raising .....	500
General appearance before and after trial .....	250
General cleanliness of motor and gear .....	125
Speed on the front at Brighton .....	500
Ease of re-starting on a hill .....	250
Economy in fuel consumption .....	500
Accuracy in stated H. P. ....	250
Cheapness of vehicle: Seven marks for every £1 per cent. that the price is below the maximum price in the class up to a maximum of 250 marks .....	250
Total .....	9,839½

For replacements of worn or broken parts marks may be deducted from the total awarded, up to a maximum of 1,000.

## No Dodging in Hennepin.

There is to be no "dodging" of taxes on automobiles in Hennepin County, Minn., in which Minneapolis is situated, if Assessor C. J. Minor can prevent it. He sent out one of his emissaries last week to hunt for taxable cars, and in three wards alone there were found 180, with an average assessment of \$468. He says that the figures for all the wards will show at least 250 automobiles, with an average valuation of nearly \$500.

## Is Most Exposed.

An observant motorist has noticed that a very considerable proportion of the lamps found on automobiles have the front glass cracked.



## DILL REACHES HOME

**He Toured Nearly 1400 Miles in his White Car  
—Some Interesting Experiences.**

James B. Dill, New York lawyer and member of the Automobile Club of America, rounded up an interesting summer experience late Sunday night when he returned to his home in East Orange, N. J., on his automobile, with which he had covered 1,398 miles of all sorts of roads since July 15. On that date Mr. Dill, accompanied by members of his family, started from East Orange with three White touring cars for the annual journey to his summer place at Rangely, Maine. He was accompanied as far as Boston by Winthrop E. Scarritt, vice-president of the Automobile Club of America, whose car completed a quartet of automobiles. The journey, of which accounts appeared in the Motor World from time to time, was in several respects a remarkable one, including several experiences of very stiff hill-climbing. It was made over a roundabout route and in a thoroughly leisurely way.

On his return Mr. Dill laid out for himself a still more difficult route, traversing the Dead River region of Maine, a wilderness so dense that even ordinary vehicles rarely enter it. One day and a half was occupied in passing through it, and the last ten miles were made after dark. Three deer were seen, one of them during the night ride, when the acetylene lamps of the one automobile with which the return trip was made acted as fine "jacks," as the hunters call the torches used in hunting. This deer was a magnificent buck, which permitted the automobile to approach him within twenty-five feet. Dazzled by the bright light, he stood with his head raised high, and would have been struck by the car had not a toot of the horn sent him scampering. The natives, Mr. Dill says, were inclined to regard the automobile with something like fear. Lumbermen and others who had never seen such a vehicle before were terrified by it, but some of them overmastered their fear so far as to indulge in the short rides which were offered them.

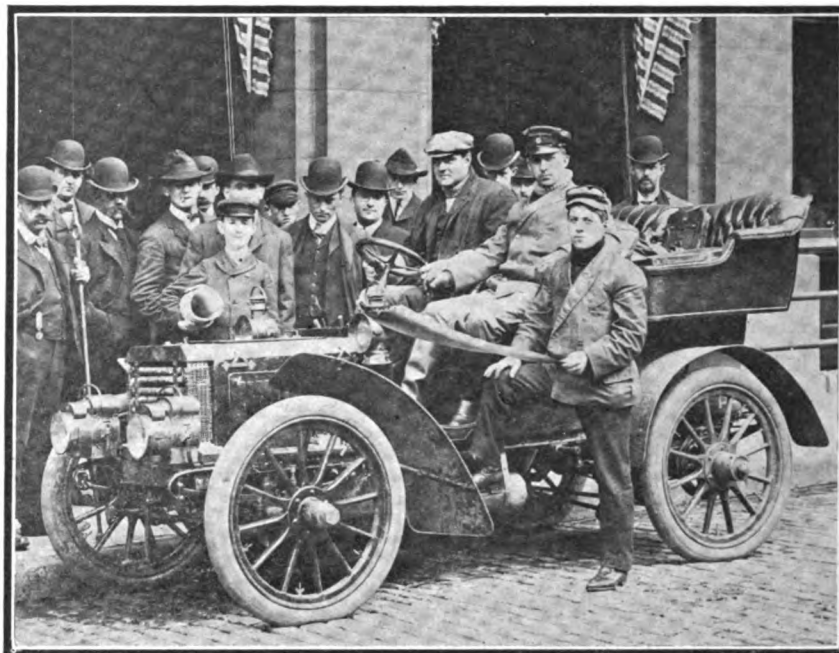
As one of the results of his experience Mr. Dill is of the opinion that it is perfectly feasible to go from Rangely to Portland in two days and a half through the Dead River region. It is necessary, however, to ford some of the streams, as the bridges are too light for a heavy machine, but the streams are shallow and have good bottoms.

After quitting the Dead River region Mr. Dill followed the Maine coast to Portland and took an inland route to Boston. Coming from that city, he left the established route at West Warren, Mass., reaching Northampton by way of Belchertown, South Amherst and Hadley. By climbing West Warren hill and turning slightly to the left, Mr. Dill says, one can avoid the bad hills

around Ware, but will find many blind roads. Of this route he says:

"The West Warren hill gives one a hard climb of one and one-half miles, but there are easy rests on the way up. The automobilist who takes this climb should be prepared for it, being sure that his brakes are all right and having his machine well in hand.

"By this route it is only twenty-three miles from West Warren to Northampton, instead of forty-six, as it would be by way of Springfield. There is only one serious obstacle in this short cut from Boston to Lenox, and that is the big hill known as Jacob's Ladder, between Chester and



Becket, which gave me trouble on the way out."

The rest of the return trip was uneventful, but Mr. Dill was delayed somewhat in the upper part of New York State by the poor condition of the roads. During the entire journey to Maine and back Mr. Dill says he did not have one serious accident. His most serious trouble was in obtaining good gasoline along the route. At one point an unscrupulous dealer mixed kerosene with the gasoline, but, fortunately, Mr. Dill tested the fluid before starting out, and thus avoided what might have been serious trouble.

### Automobile 'Buses for Hoboken?

Dissatisfaction with the trolley car service in Hoboken, N. J., threatens the Public Service Corporation of that city with competition in the shape of automobiles running between the several ferries. Corporation Counsel James Minturn is one of those agitating the matter, and he is quoted as saying that several local financiers are interested in the proposition.

French automobiles are beginning to make their appearance in Portugal. According to a consular report from Oporto, eleven were imported in 1901 and twelve in 1902.

## A TOURING CHICAGOAN

**President Chas. W. Gray and the Peerless Car  
in Which he Journeys.**

One of the most confirmed tourists in the West is President Charles W. Gray of the Chicago Automobile Club. His run to the Mammoth Cave, Kentucky, last summer, where he was one of the only two members of the party to complete the journey, will be recalled.

Early this month he began a tour through Northern Illinois, Southern Michigan and

Northern Ohio, touching at Detroit and Cleveland. His departure from the latter place in a Peerless touring car is shown. His companions are John C. Ross and J. A. Ellis, both of Chicago. It was Mr. Gray's intention to make a quick trip from Cleveland to Chicago, but heavy rains made the roads so bad that speeding was out of the question.

Much rain was also met with on the run from Chicago to Detroit, where the party--which then included Mrs. Gray--went to attend the races. By dint of determined plugging through almost impassible roads, from which test the Peerless car emerged triumphantly, the Straits City was reached at 3 o'clock in the afternoon, the car being incased in mud until little more than its shape was visible.

### Who Pays the Fines.

An English motorist has a novel agreement with his chauffeur. As stated by the latter, it is as follows:

"The first time I am fined he will pay; the second time I pay, and the third time I get dismissed."

In spite of this the unfortunate man was arrested for "furious driving." He asserted that he was going slow at the time.

## BATTERY FALLING OFF

### Some of the Causes That Reduce the Capacity of the Cells.

The apparent falling off in the capacity of a battery can always be traced to some cause, and when a battery gives indications that something is wrong, take it out of the vehicle and look for the trouble. There may be a dry cell, due to a leaking jar; sulphated plates, due to the battery having been run too low and not properly charged; the cells may need cleaning (and this trouble is always indicated by short capacity on discharge and heating very quickly on charge), and when a cell is cut apart the deposit or sediment in the bottom of the jar is found to be up to the plates, short circuiting them, or some of the cells may be short circuited, due to broken separators, says the Exide Battery Instruction Book.

If the trouble cannot be located by the eye, connect the battery in series, and discharge it at the normal vehicle rate by running the positive and negative wires either to rheostats or a receptacle filled with very weak acid or salty water. To the end of each wire attach a lead or iron plate, and by suspending them from sticks across the top of the vessel the flow of current can be regulated by moving them closer or further apart. If all cells can be reached, the battery need not be removed from the vehicle, but can be discharged by using the charging plug connected to resistance as set forth above.

As the discharge progresses, the voltage, as indicated by the voltmeter connected to the terminals of the battery, should be frequently read, and as soon as it shows a noticeable drop the voltage of each cell should be read with a low reading voltmeter, and such cells as read 1.70 volts or less marked. These individual cell readings to be continued until all cells reading lower than the average are located. While the readings are being taken the discharge rate should be kept constant and continued until the majority of the cells read 1.80 volts. This discharge should be followed by a charge until the cells which read 1.80 volts are up, when the low cells should be cut out and examined for the cause of their lowness.

If the acid is low in gravity and the plates have a whitish appearance, and there is no mud or deposit in the bottom of the cell, the plates are sulphated. They should be put back in the same solution and given a long, slow charge at quarter the normal vehicle rate. This will cause the gravity of the electrolyte to rise and the cell to come back to its full capacity. Continue this charge for forty-eight hours, or until the gravity of the electrolyte stops rising and the voltage is about 2.55 volts per cell. Then discharge at the normal rate, and if full capacity is not reached give another low rate charge. If the temperature of the cells gets too high

(100 degrees F.) reduce the charging rate or stop charging for a time until the temperature falls.

As a rule, more than one cell will be found in this condition, and all of the weak ones should be grouped by themselves and charged in series as a separate battery. If there is not enough resistance in the charging rheostat to cut the current down to the proper point, use water resistance referred to above in series with it, as shown on page 30.

While a cell is being treated, the cover should be removed (the sealing compound can be loosened by using a hot putty knife) and not replaced until the cell is again ready for service.

### Standards for Automobile Bodies.

The merits and defects of the different forms of automobile bodies employed are pointed out by M. Auscher, who, before the Paris Congress, insisted upon the necessity of providing plenty of room for entering the car sideways by means of movable seats or otherwise.

He did not offer any suggestions of his own as to carriage design, but presented the following propositions to the congress: The adoption of standard sizes of frames, usually manufactured in series, of 1m 80x 80cm. for voitures, 1m. 90 or 2m.x80cm. for light carriages, and 2m. 10 or 2m. 20x85cm. for big cars; the designing of bodies with ample side openings which will permit of the wheel base and length of frame being shortened; the fitting of the mechanism in such a way that nothing will project above the level of the frame; the placing of the tanks below the frame so that they will not interfere with the carriage body; arranging the footboard so that it will form part of the chassis and not of the carriage body, by which means the body could be easily removed from the frame without its being necessary to pull up the footboard.

### Supt. Bull was "Interested."

Percy P. Pierce ran his Arrow automobile at a speed exceeding the lawful limit at Buffalo, N. Y., on Saturday last, getting from Gates Circle, in Buffalo, to the International Hotel, at Niagara Falls, in just thirty-eight minutes. He had as guests Mayor Knight, Superintendent of Police Bull and Frank W. Hinkley, the Mayor's secretary. Superintendent Bull said he had long desired to get a first hand idea of automobilizing speed. Pierce furnished it for him.

When the automobile stopped in front of the International Hotel Mayor Knight looked relieved as he stepped out safely. Superintendent Bull acknowledged that his instruction in speed had been interesting, and he emphasized the "interesting."

### Pleasant Prairie a Pleasant Place.

The farmers of Pleasant Prairie, Wis., who have been suffering at the hands of reckless automobilists, have literally taken up arms against the automobile. They have given notice that guns have been procured, and that automobiles venturing into their neighborhood will get their tires punctured with buckshot.

## COST OF GASOLENE

### Worries Users of Steam Cars—Retail Prices are Reaching Prohibitive Stage.

"Users of steam cars are feeling the effects of the successive increases in the price of gasoline," remarked a well-known tradesman to a Motor World representative, "and if they continue it is hard to say what will happen."

"A motorist can't afford to buy his gasoline in small quantities nowadays. The price demanded by retailers, and especially by country storekeepers, is so high as to be almost prohibitive. No one but a rich man can stand it now, and there's no telling where it will end. I rarely venture far away from home any more unless I have a supply of gasoline sufficient to last until I get back."

"A little calculation is all that is needed to make the matter clear. You can go 100 miles on from 10 to 15 gallons of gasoline, depending on the way you use it, the sort of roads you travel over, etc. Now, by purchasing gasoline in quantities you can get it down to about 10 cents a gallon, and at that your 100-mile ride does not cost you very much—between 1 and 1½ cents a mile. But if you are compelled to buy it at retail it will cost you double; and there are places where they will stick you even more than this, and give you vile stuff that is not worth half the money. The matter has become a serious one to men of small means."

### Got What They Asked for.

When next the employees of the Locomobile Co. of America address a petition to the company they will probably exercise greater care in its preparation. Some time ago they petitioned for a "nine hour day with ten hours' pay," or at the then regular weekly wages. The company decided that the request was reasonable and granted it exactly as the wording called for, closing the works up 5 o'clock on Saturday instead of 6 o'clock, as heretofore.

Thus the employees get a nine hour day with ten hours' pay—but they get just one.

A. L. Riker is the man who is given the credit of seeing the point presented by the faulty syntax.

### Toward the Hundred Mark.

Although slow to get started, the automobile is increasing in numbers at Albany, N. Y. A tradesman of that city places the number of cars now owned there at between 75 and 100, and says that scores will be sold during the remainder of the season.

### Flower Parade for Omaha.

In connection with the carnival at Omaha, Neb., next week, an automobile flower parade will be held on Wednesday, October 7th. There are some sixty automobiles in Omaha, and it is expected that a large number of them will take part.

## HORSE POWER DEFINITION

### Cause of the Present Discrepancy and the Difficulty of Correcting it.

Manufacturers and purchasers alike are at present hopelessly at sea in the matter of definition of the actual horsepower of the gasoline motor, and it is high time that some standard rating should be adopted in the interests of all concerned, says a transatlantic contemporary.

The matter should not present any great difficulty if honestly set about by a committee appointed by manufacturers themselves, or by the automobile club, who possess all the material for arriving at a satisfactory definition.

The difficulty would appear to be not so much a mechanical one as a political one on the part of certain makers, having reasons of their own for overstating or understating the power of their respective patterns, and indeed it is no uncommon thing to find different types or patterns of cars of varying power which, although made in the same works and presumably designed by the same designer, bear no consistent relation to each other when the cylinder sizes are compared with the catalogued horsepower. Thus, in one case, we find a so-called 6 horsepower is in reality of that power only when running at maximum engine revolution and under the most perfect conditions; probably  $4\frac{1}{2}$  horsepower would here be nearer the mark under common usage. Then, however, when we turn to the 10 horsepower, in all probability it will be explained that that is the "nominal" power and a full brake horsepower of 14 guaranteed; thus in one car allowance is made for a drop in the maximum, and in the other the full and usually unattainable power is stated.

It would appear that this state of chaos has been arrived at largely by the different methods in which manufacturers have sought a market for their products, and the particular circumstances surrounding them in the evolution of their cars from the initial effort to the latest type.

Firm A enters the business, say, with a single pattern of  $4\frac{1}{2}$  horsepower voiturette selling at £150, but B comes along with a car at the same price and gives the purchaser 6 horsepower for his money, so that, in order to maintain his position, A must increase his car to 6 horsepower or call it that; but, as the car is already cut fine in price, it is sought to obtain the increased power at the least increase of cost, so a few millimetres are chopped off the stroke, the bore somewhat enlarged, and up goes the speed of the engine, and, consequently, the power; but the design has now been altered to suit a particular purpose, and is no longer as projected by the original designer. It may be better for the change, but the chances are it is worse. Take another case, where low

price is not the prime factor. Here the designer is given a chance. He requires a certain power, and knows he can produce a steady running and more satisfactory engine by employing two cylinders, and running at moderate maximum speed with a fairly long stroke in proportion to bore, which arrangement will extract more work from each explosion, and so give better value in actual power from the amount of gasoline consumed. Thus in the 12 horsepower De Dion, the working speed is given at 1,400 revolutions, with cylinders 100x120 mm., whereas a Clement of the same listed horsepower runs at but 750 revolutions, though with four cylinders of 75x120, as against two cylinders on the De Dion.

It will be noticed what a wide difference there is in the bore of these two engines, though the stroke is the same, and assuming for argument that at the speeds given the stated horsepower is reached in each case in a workshop brake test, also assuming workmanship to be equal, there is almost double the cost of manufacture in the case of the four cylinder car.

The uninitiated purchaser may well be excused if he fails to follow the reasoning of this widely varying practice, for in the case cited he apparently gets the same power from two cylinders as from four, at presumably less cost, and yet another firm will give at lower cost the same power from one cylinder.

The true horsepower that this class of purchaser wants to arrive at is the actual available power under all round conditions on the road in combination with reliable running at the least expenditure of gasoline, for it is obviously a wasteful policy to unduly shorten the stroke in order to gain greater power by the medium of higher piston speed if by so doing the fullest possible calorific value is not extracted from the gasoline consumed.

In any case it would appear that to arrive at a standard definition of power it will be necessary to make the speed factor the basis of calculation, and also to deduct some percentage from the maximum test speed to provide a road working margin more nearly representing the actual power recoverable from the motor in the hands of ordinary drivers on ordinary roads.

### The Bishop's Estimate.

The Bishop of St. Asaph constituted himself an expert in speed measurement in an automobile case tried at Rhyl, England, on September 7. A Mr. Buckley, of Rycroft Hall, near Manchester, was the offender against the speed regulations. The Bishop attended court, he said, at great personal inconvenience because he regarded it as a most scandalous case.

According to the prelate's testimony Mr. Buckley passed the ecclesiastic on the road at a speed of fifty miles an hour. When the court imposed the maximum fine of £10 the Bishop expressed regret that the magistrate could not inflict a penalty more severe.

## HIS MISTAKEN DIAGNOSIS

### Blamed the Spark Plug for the Faulty Explosions—Its Innocence.

It was the spark plug that was giving all the trouble. The mecanicien knew it because—well, principally because he was sure that everything else was O. K., the car having had a most thorough overhauling and put in perfect order. So it must be the spark plug, he declared.

A new plug was procured and put in. It was a slight improvement—enough to confirm the mecanicien in his belief, but leaving a great deal to be desired in the way of perfect sparking. At his wits' end, the man thought himself of a certain car designer who had been called upon in the past to settle a number of knotty questions. Fortunately he happened to be in the garage at the time, and was sent for and appealed to.

He listened to the mecanicien's voluble explanations without a word. Then he tried the two spark plugs—the new one and the old. A close examination of both followed, and then the old one was put aside. Taking out a penknife he proceeded to carefully enlarge the space between the sparking points of the new plug. When the two wires were far enough apart to permit the thick part of the knife blade to pass between them he seemed satisfied. "Now, try it," he said. The mecanicien did so, and a great change was apparent. The spark was good and fat and it leaped across the space in fine style. Then the engine was started, and the explosions came as regularly as clockwork. "I said it was the spark plug!" exclaimed the mecanicien triumphantly.

"But it wasn't the spark plug," returned the man who had succeeded where the workman had failed. "The trouble was somewhere else. Probably in the explosion chamber, due to a slight defect in the compression or to the fact that the mixture of gas is not just right. Whichever it was affected the spark plug, or rather it imposed on the latter a task which it was unable to perform."

"You see," he went on, addressing the Motor World man, who was an interested listener, "the sparking points were pretty close together in both plugs, and while this would have exploded a perfect mixture without any trouble, when it came to an imperfect one it failed. Now, with the points set further apart, the distance the spark had to jump was increased, and it was just that increase that gave the plug greater efficiency. The trouble is still there—in the cylinder—and it will have to be removed sooner or later. The spark plug as I have fixed it works very well now, but the trouble will probably become more pronounced and the plug will have to be treated again; and, finally, it will reach a point by which further manipulation of the plug will be useless."

## WILL MAKE MECHANICS

**Familiarization with Automobiles will be an Education for Their Users.**

"One thing that the increasing use of automobiles is doing, and will do still more in the future, is the gradual familiarization of its users with mechanics," remarked Manager Starratt of the John Simmons Co. to the Motor World man.

"Since we got into the automobile business—a quite natural move, by the way, as we make and sell steam fittings of every kind—we have been giving the matter very careful attention. It is quite clear to us that automobile users are going to be divided into two classes—those who have mechanics to look after and often to drive their cars, the other composed of men who know or learn sufficient about mechanics to look after them on most occasions. The latter will be much the larger class, while the former will consist of the men who now have horses and carriages with coachmen to attend to them.

"The ordinary user, however, will be the man who buys an automobile because it is the best way to get around quickly—to get to and from the office, to take short trips or more ambitious tours during the summer, when his vacation time comes, etc. Not being rich, he will not, as a rule, buy the higher priced cars. Runabouts and so-called light touring cars will be the great sellers, not only because of their moderate price, but by reason of their all around adaptability and their low maintenance cost. In the hands of such men they will be made to pay for themselves by the saving in care fare, etc.

"Everybody knows that the best motorist is he who understands his car and uses it intelligently. To do this he must give some time to it, learn its principles and its peculiarities, know where to look for trouble and how to remedy it when found. By so doing he will not only be able to continue interrupted journeys, but even to prevent interruption. He will get more satisfaction out of his car than he could possibly if he left it to the care of a mechanic. It will, in short, make an amateur mechanic out of him. The ordinary American possesses considerable natural ability in this line, whether he has done any actual work at it or not. He has the brain to understand how a steam or gas engine works, and by a little application he works into the way of using his hands to make adjustments and to put things to rights. There are scores of little things to look after; and time and money are both saved by attending to them one's self. No one grasps this quicker than the average motorist, and the result is going to be a great extension or dissemination of mechanical knowledge that will prove of vast benefit. The automobile manufacturer will benefit almost as much as the individual user, for the former will have his product treated with an

intelligence and a skill that cannot help causing it to give greater and more general satisfaction than could be obtained in any other way."

### The Noise Jarred Him.

Perhaps the point where the steam car user scores most heavily over his gasoline rival is in the item of noise—and particularly the noise of the transmission gear. To watch the driver of a steam car when he is brought face to face with an aggravated case of the kind is a study.

Conversing with Manager Paul H. Deming at the new White salesroom and garage, in West Forty-ninth street, last week, an instance was witnessed by the Motor World man. One of the chief charms of the White touring car is its almost absolute silence. A big gasoline car went rolling by on the smooth asphalt, the exhaust popping loudly. Almost exactly in front of the White place the driver made a gear change. Either he was particularly clumsy at it or his gears were in shockingly bad condition, for there ensued such a grinding, shrieking, protesting sound that passers by turned to see the cause of the outcry. Finally the reluctant gears shot into place with a shrill, long-drawn cry like that of a child in pain, that got on one's nerves and left them shattered.

"How would you like to have that for a steady diet?" asked Deming, with a look of disgust on his face.

### A Novel Shooting Box.

M. T. Reeves, of Columbus, Ind., who has been unable for some time to use his legs, bought an automobile to use during the summer vacation on his farm in Rushville. Last week he used it in a squirrel hunt.

The woods in the vicinity of Rushville have nearly all been cleared, and grass planted among the trees for pasture. Mr. Reeves took a shotgun, boarded his car and ran the machine into the woods. Seeing a good location, he stopped the machine and waited for a squirrel to put in an appearance. He did not have long to wait, and killed one with the first barrel.

Seated in the automobile, he moved about in the woods, and in ten shots killed nine squirrels. After the hunt was over he drove the machine around and picked up the game. During all the time the shooting had been going on Mr. Reeves did not leave the seat of the automobile.

### Automobile Routed Strikers.

Sagar Berry, president of the Berry Candy Company, of Chicago, driving his big automobile on Friday last, routed a crowd of striking candy makers and their sympathizers, who attempted to obstruct his path as he dashed toward the factory at Sangamon street and Washington boulevard, carrying three of the non-union girls who are at work in the plant.

A whirr and a dash of the machine scattered the would-be blockaders, and with a triumphant smile Mr. Berry reached the factory in the midst of a volley of missiles which the crowd hurled at his automobile as he passed their ranks.

## FENDERS FOR CARS

**As Necessary as Cowcatchers for Locomotives, Declares Dr. Miesse.**

Dr. Americus Miesse, of Lima, Ohio, is a man who believes that a fender is just as necessary on an automobile as a cowcatcher is on a locomotive. This is partly due to the fact that the doctor has invented a fender and is seeking to organize a company to place it on the market. He is now in Toledo with this purpose in view.

The framework of the Miesse fender is made of steel, while the body, or surface, is made of rattan, closely woven. This frame is fastened to the steering rod of the automobile, this being necessary in view of the fact that the front axle of an automobile remains stationary.

With a streetcar fender, the device is fastened to the bed of the car, and as the car makes a turn there is no protection in front of one side of the trucks, as the wheels are thrown out of line with the body of the car. In the construction of Dr. Miesse's automobile fender the frame is attached to the steering bar and turns with the wheels, never leaving the wheels without the fender directly in front at all times. This action is acquired through a swivel and a compound coupling device.

There is another important part of the fender, found in two compressed air boxes, one on each side and located in the upper part of the fender. In case of a collision with some object, the air boxes, or springs, allow the fender to be pressed toward the automobile, thus making a sort of cushion to keep the fender from being broken. The fender is held up by means of two chains, and will support the weight of at least 500 pounds.

### Provides Quarters for Automobile.

Accommodation for the owner's automobile is to be provided on one of the largest steam yachts which will appear in American waters during the season of 1904. The yacht has been designed for a wealthy man whose name is kept in the dark at present, but who, judging from the special features contemplated in the plans, must be an amateur photographer as well as an enthusiastic automobilist, and probably contemplates extended voyages, as there are to be quarters for a physician and a dispensary. He is also a family man, as the plans include a complete nursery and a playroom for children.

### Big 'Busses for Erie.

The Erie Auto Coach Company, which proposes to give to Erie, Pa., a public automobile service, put the first of its coaches in operation on Wednesday of last week. Some of the coaches to be used will be large enough to accommodate forty passengers.

## PARK BOARD RECANTS

### Framers of an Anti-Automobile Ordinance Votes to Purchase an Automobile.

There was an amusing discussion in the South Park Board of Chicago at its meeting, held on September 16, when Commissioner Hodgkins made a motion for the purchase of an automobile for the use of the superintendent. It was followed by a vote of 3 to 2 in favor of the proposition, and an official automobile will now travel over the very boulevards from which the board debarred automobiles by an ordinance passed two years ago. Some extremely pertinent and suggestive points against speed regulation as it is carried on were made during the discussion.

"As long as an act by this board regulates the speed of automobiles to eight miles an hour," said Commissioner Crilly, "and it remains an indisputable fact that a benzine wagon is no good unless it exceeds this limit by twice the prescribed rate, the only advantage I can see for us to take this additional expense is to afford this board an opportunity to violate its own ordinance."

"An automobile is just the thing we want," said Commissioner Best. "It is the most economical. Three neighbors of mine in Drexel Boulevard have recently disposed of their horses and carriages to replace them with automomiles. They find their new purchases a great saving."

"An automobile is always an expense," insisted Commissioner Crilly. "It is constantly in need of repair. It is a nuisance."

President Foreman assured the dissenting members that the automobile would cost only \$1,800, and if any repairs were necessary they could be made by park employees.

Commissioner Hodgkins referred to figures.

"We are now paying \$80 a month for the maintenance of the four horses and phaeton used by the superintendent and the members of this board," he said. "If an automobile is purchased, in two years it will pay for itself, and the phaeton horses can be utilized for some other department of park work or can be sold."

"Time is the most important advantage to be gained by the automobile," declared Commissioner Best.

"Time?" asked Commissioner Crilly. "I ask you to refer to the ordinance passed by this body. It regulates the speed of autos to eight miles an hour. You will be losing time if you intend to abide by the ordinance, for it is no secret that our horses go at a much faster clip than that."

It was after Mr. Crilly's last remark that the vote was taken. He might take his revenge by introducing and pressing a new ordinance permitting to automobiles a reasonable rate of speed.

Never use chloride of zinc for soldering, as it eats through the wires. Resin is the most suitable material.

### Fight Fire With Automobile.

An interesting experiment was recently tried on the Raser estate at Ashtabula, Ohio, where sparks from a passing train on the Nickel Plate Railroad had set fire to the grass in the adjoining meadows, says the Scientific American. To cope with the fire ploughing was necessary, and, the horses not being available at that hour, the owner's automobile was pressed into service.

Ropes from the ends of the singletree were attached to the rear axle of the machine. Mr. Raser held the plough handles and his brother operated the automobile. Furrows were turned, but it was found to be impossible to operate the machine slowly enough to get the best results. The tendency of the plough was to skim the ground in places, and it was with difficulty that the man at the plough handles could keep up. The automobile, however, served the place of a plough horse sufficiently well for the purpose of breaking up the surface of the ground, and the work was done more rapidly than it could have been done in any other way.

This first test led to another in a few days, when an acre and a half of grass was to be mowed. Here, too, it was found impossible to operate the machine as slowly as was desirable. However, it was proved that a piece of grass which would require three hours with horses could be mowed in one hour with an automobile as the motive power. The machine, which is of the gasolene type, weighs 1,800 pounds, and has a seating capacity for four persons.

### Antwerp Regulations Withdrawn.

The absurd Antwerp automobile regulations limiting the speed to five kilometres an hour have been withdrawn. The reason given for the withdrawal is the fact that the festivities in celebration of the centenary of the Antwerp docks are now ended, and that consequently the town has resumed its normal aspect and traffic is no longer congested. The real reason was, however, the outcry raised by motorists and manufacturers, who declared that motoring was impossible under these rules, and that an end to the motor industry would follow their continued enforcement.

The Burgomaster's proclamation which notifies the withdrawal of the obnoxious regulations, points out that the regulations made in 1899 remain in force. These limit the speed of automobiles in country districts to thirty kilometres an hour.

### Course for German Trials.

Several courses have already been suggested for the trials for the 1904 Bennett Cup race. One is that they should be held on the sandy seashore of the northeastern end of the island of Usedom, where the sand is quite hard enough to support the weight of the heaviest car. There is a course there of fifty kilometres in length which is frequently used by automobiles. The road is flanked on one side by precipitous cliffs, and on the other side by the sea. Another suggestion is to hold the eliminatory trials on a 250 kilometre course along the uninhabited shores of the Gulf of Dantzig, between Divenow and Putzig.

## KINDLY AUTOMOBILISTS

### Good Deeds Which Prove That the Motorist Has a Good Heart.

Some recent incidents in connection with automobiling might be commended to the attention of those opposed to it, to disabuse their minds of the idea that motorists have no regard for the safety or comfort of others than themselves. The man who, without hesitation, converts his own vehicle into a temporary ambulance is apt to carry his heart in the right place.

On Saturday night a cabman, who gave his name as William Cox, attempted to drive across Columbus avenue, New York City, while driving through Sixty-fourth street, and came in collision with a north-bound trolley car. The man was thrown to the ground, where he lay unconscious. Charles Young, of 52 West Forty-third street, happened along in his big touring automobile at the time of the accident.

"I'll take him to Roosevelt Hospital; he may be in a serious condition," Mr. Young said to the policeman who had gone to the man's assistance. The policeman lifted the man into the car, and Mr. Young started full speed for the hospital, where the injured man was cared for.

The other incident occurred in Chicago one day last week, when a despondent man named John Vaughn took carbolic acid with suicidal intent. As soon as it was known what had occurred the man was placed in an automobile, which was driven swiftly to the nearest point where relief could be obtained for the poisoned man. Death was too swift for the automobile, however, and the run which it began as an improvised ambulance it ended as a hearse.

### Why Tires Heat.

The efficiency of tires in respect to tractive effort depended upon their spreading on the road surface; in other words, the efficiency increased up to a certain limit with the surface of contact, says M. Arnaud, one of the speakers at the Paris congress. It was therefore advisable not to pump the tires too hard, and if they were pumped hard on racing cars it was solely because, if they were soft, they would get very hot, and this heat must necessarily mean a loss of motive power.

It was really curious to observe the quantity of energy that could be stored up in rubber, the speaker went on. He had carried out a number of experiments with rubber, the results of which he communicated to the congress, and the conclusion to be drawn from them was apparently that this remarkable capacity for storing energy was the cause of their lower efficiency on fast cars when the tires had to be pumped hard to prevent heating through the continual expansion and contraction of the rubber. He expressed the opinion that the outer cover alone heated, and not the air in the inner tube.



### Funeral for Baron Rothschild.

The sentence of one day's imprisonment passed upon Baron Henri de Rothschild by a police magistrate in Paris upon his conviction on a charge of driving his automobile too fast is in accordance with the policy of the French authorities to send rich automobilists to prison because of their indifference to fines.

Under the law the Baron is a criminal convict, but he is a very wealthy, very kindly and very popular physician, and he is to be given an apotheosis, a martyr's crown, a hero's laurel, or any other old thing in the line which history records as having been conferred upon those who did great stunts—but generally after they were dead.

For twenty-four hours, at some time within three months from the passing of the sentence, the Baron will be civilly dead and buried. The law considerably makes him the arbiter as to the exact date of his interment. The funeral will be a grand affair, for the Baron will be escorted to the gate of the prison of La Saute by a procession of the most beautiful and fashionable women in Paris, who will carry bouquets of flowers and hand embroidered banners, while musicians will furnish strains which will be consolatory or exhilarating, according to the individual mood of the hearer.

The return to life will be another occasion for graceful pageantry, and the Baron will be welcomed anew to the world by the same beautiful women, the same—or similar—sweet flowers, and the same tuneful dispensers of hot air whose clarinets, trumpets, oboes, et al., will turn loose siroccos of triumphal notes. It's great to be a rich malfactor—sometimes.

### Indispensable at Clam Bakes.

A new phase in the varied adaptability of the automobile to purposes of business or pleasure was recently developed by a party of automobilists from Orange, Mass., who went for a clambake to a distant woods, near a nice spring of water, where the feast is usually given. The clams and all the fixings were loaded on the car, and when the destination was reached the material for the bake was placed for the cooking. Two of the automobiles generated steam, which was applied to the raw material, and the cook-while-you-wait process began. When the covers were laid the steamed clams, corn, chicken, sweet potatoes, oysters, etc., were thoroughly cooked, and in the same way coffee was made and water heated for washing the dishes. Before starting for home the woman members of the party turned on a little steam to refresh their crimps, and a most successful clambake was at an end.

The next International Automobile Congress is to be held in Milan in 1904. The Automobile Club of that city has voted a sum of \$2,000 for the entertainment of the members of the congress.

### Seeing New York.

On lower Broadway a short time ago many passersby paused long enough to bestow a look of astonishment upon a vehicle which was slowly making its way toward the Battery. It was one of the many dismal days, with a slight drizzle of rain that had a depressing effect on nearly every one. But that did not seem to bother the occupants of the vehicle. It was a huge, lumbering affair, with high perched seats running laterally, thus causing all the passengers to face frontward. Of these passengers there must have been more than two score, every seat being filled. Of both sexes and all sizes, most of them wrapped in waterproof garments and some holding aloft umbrellas, they presented a bizarre appearance, which was not lessened when it was seen that this wheeled ark was horseless. To the initiated the sight of a number of large battery boxes made it plain that electricity was the motive power. It lurched on its way, winding in and out the traffic, proceeding at a decorous pace behind trolley cars, and pulling out to go by them when the opportunity offered.

Curious glances were cast at the vehicle, and most of them were rewarded, for a neat brass plate stated that this was the "Seeing New York" coach.

### Where Gutta Percha Grows.

The limited output of guttapercha, practically all of which is obtained from the East Indian Islands (Borneo, Java and the Straits Settlements), has been the subject of much concern owing to its steadily increasing use in electrical equipment. An investigation made in the Philippine group has shown that several localities produce both rubber and guttapercha in large quantities. Guttapercha is plentiful in Mindanao, but in the Southern Philippines it is of fair to poor quality, containing a considerable amount of dirt and resin, but by a chemical process the pure gutta is extracted from it, and is said to be equal to the best on the market. The felling and ringing of guttapercha trees, which has wrought havoc in other gutta producing countries, has been practised throughout the southern islands despite regulations to the contrary. *Dichopsis gutta*, the best variety, seems not to be found in the Philippines.

### The Aborigine and the Car.

Chief Joseph, of the Nez Percés, the tribe of Indians which gave the United States troops some hard fighting about twenty-five years ago, and himself one of the doughtiest fighters in that war, took an automobile ride through the streets of New York on Monday, accompanied by another brave, both in war paint and feathers. It was a striking conjunction of aboriginal barbarism and twentieth century progress. Chief Joseph has been caught in that vortex which draws to itself all sorts of odd people—the show business. He is the star in a troop of Indians, who are in the city at present.

### Wedded at Thirty Per.

L. C. Woodward and Mrs. A. Franklin, of Los Angeles, Cal., were married at Fresno last Thursday, and secured worldwide mention of the event by having the ceremony performed in an automobile going at the rate of thirty miles an hour. The Rev. Duncan Wallace, pastor of a Presbyterian church, tied the knot, and one of the two witnesses was W. Parker Lyon, president of the Fresno Automobile Club, who loaned his racing automobile for the occasion. There be cynical persons who will find a suggestion in the event for remarks about marrying in haste.

It was to be expected that the automobile would do its full share of figuring in romances. This wedding on the fly was not the first, nor was it the most exciting. One of the best stories comes fresh from France, and relates to a merchant who went for an automobile ride near Paris last week, taking with him his daughter, and both going as guests of his business partner. Suddenly the machine was sent along at a terrific rate, and the merchant begged his partner to slow down. Instead of so doing the partner demanded the daughter's hand in marriage. Otherwise, he declared, he would drive the machine against a tree.

It was a case of life or death, a smashup or a son-in-law. The young woman was evidently in the plot, so the merchant chose life and a son-in-law. A prosaic incident of the affair was the taking of the automobile's number by the police and the summoning of the driver to court. He was fined, and paid the penalty with smiles. Having won out, the price was paltry.

### Alcohol's Good Showing.

Some interesting experiments have recently been conducted in Austria with a view to ascertaining the relative heating values of gasoline and denatured alcohol. The tests were conducted with two engines of 8 horsepower nominal, one designed for gasoline and the other for alcohol as fuel. The gasoline used had a specific gravity of .700, and a calorific value of 7,700 calories per litre. The alcohol had a strength of 90 per cent, with a value of 4,900 calories per litre. The consumption in the case of gasoline was 340 grammes per horsepower, and 373.5 grammes for the alcohol. The efficiencies worked out at 16.5 per cent for the gasoline and 28 per cent for the alcohol.

### Pittsfield Motorists to Entertain.

President Brandon and Secretary Merchant, of the Berkshire Automobile Club, have made arrangements for the care of the members of the Automobile Club of America, who will spend the night in Pittsfield on September 29, on the return trip from Boston to New York. Rooms have been reserved for the party at the Wendell, Maplewood and New American hotels, and the automobiles will be cared for by Harry E. Jeffers at the Central station and sheds near by.

**'Bus Line to White Mountains.**

Lucius J. Phelps, of Stoneham, Mass., who recently made the ascent of Mount Washington in an automobile in remarkably quick time and without an accident, is an enthusiastic advocate of the idea of establishing a regular summer line of automobiles between the Glen and that famous summit. The proposition, which has already been noted in the Motor World, was broached by Mr. Phelps to every automobilist visiting the Glen House during his sojourn there, and he was surprised at the favor it met with.

The scheme has been discussed among automobile men in Boston, and they generally believe it is feasible if the vehicles are built specially for the hard service which would be required of them. Local experts say that even a large ten or twelve-seater could make the climb under present conditions.

The proprietors of the Mount Washington road have taken pains this year to advertise that the thoroughfare is not suitably constructed for the use of automobiles. Still, Mr. Phelps believes that twelve-seated brakes could be constructed which could travel over the present road at an eight-mile rate. He believes that these could be built with bodies weighing no more than those of the present mountain wagons, and that the machinery to operate need not weigh more than twelve hundred pounds.

The present road is not hard enough to present an ideal surface for the motor vehicle, but the chief drawback is the waterways—"thank-you-ma'ams," as the summer tourist is pleased to call them—which prevent a motor carriage from travelling fast without jolting the passengers. Mr. Phelps would advocate the control of the road by the State, under whose auspices he would like to have it surfaced with macadam. Then he believes that it would be possible to operate the cars with ease.

Even with the present surface Mr. Phelps thinks that the carriages could be run on a regular schedule, making both the ascent and descent in one hour's time. It would be his idea to have the 'buses run on such a schedule that they would not interfere with horses and wagons which might use the road.

**Cleveland's Sight Seeing Bus.**

An automobile 'bus, seating twenty-six persons and designed to be used for sightseeing purposes, is now being built in Cleveland, Ohio. J. Murray, No. 171 Merwin street, is its builder, and he has it nearly completed.

Although built on such a massive scale, this car will go at a speed of from six to twelve miles an hour. It has a 30 horsepower gasoline engine, has a tank holding ten gallons of gasoline, and carries sixty gallons of water.

"The Motor: What It Is and How It Works." See "Motocycles and How to Manage Them." \$1. The Goodman Co., Box 649, New York. \*\*\*

**Only a Motorist.**

The persecution of British motorists by petty magistrates has caused a victim to burst forth into rhyme. Under the suggestive pseudonym of "A Mangled Motorist," he sings this sanguinary song of the auto-phobe:

Here is a motorist,  
Smash all his bones,  
Get ready brickbats,  
Pile up some stones.

Heave a big rock at him,  
Douse him with mire,  
Pelt him with stocks,  
Set him on fire.

Bash his poor head in,  
Whang him around,  
Only a motorist  
Brought to the ground.

Bake him alive,  
Boil him in tar,  
Cut him in pieces,  
Mangle his car.

Break off the wheels,  
Murder his wife,  
As for the chauffeur,  
Embezzle his life.

Members of Parliament.  
Justices high, too,  
Tell you that this  
Is the right thing to do.

So blacken his eyes,  
And flatten his nose,  
Only a motorist,  
Fell him with blows.

Fracture his face,  
Pommel his head,  
Then in the ditch  
Leave him for dead.

If he hits back  
During the fights,  
Call the police,  
For he has no rights.

Drink up his gore,  
Heed not his pain,  
Though weary of hitting,  
Hit him again.

**Winners at Deauville.**

In the automobile races at Deauville on September 10 the winners in the tourist section, arranged according to the selling prices of the cars, were as follows: Value 4,000 francs, M. Cabillot, 8 horsepower De Dion-Bouton; value 4,000 francs to 8,000 francs, M. Renaux, 16 horsepower Peugeot; value 8,000 francs to 12,000 francs, M. Pelzer, Gardner-Serpollet; value 12,000 francs to 16,000 francs, M. Rasson, Clement; value 16,000 francs to 25,000 francs, M. Gasté, Automotrice.

**All Types Represented.**

Of the 140 entries in the British 1,000 miles trials 85 are British and 55 foreign cars. There are 129 gasoline cars and nine are steam cars. There is one car driven by an internal combustion engine, using ordinary petroleum as fuel; three of the steam cars use paraffine as fuel, and one is a combination of the gasoline and electric systems.

**Peculiarities of License Applications.**

Clerks of the Massachusetts Highway Commission are puzzled by applications for duplicate number plates sent in by automobilists to whom the two plates required by law have already been issued. The law does not allow the same numerals to be used on more than one machine, and the question is as to why the duplicates are wanted. Some plates may be lost in one way or another, but while taking account of this tendency for plates to get lost, the commissioners' officers are disposed to keep an eye out for any scheme to evade the law by a confusion of numbers.

Another noticeable matter in the Massachusetts registration is the number of applicants from outside the State. A little story of three Pawtucket physicians, out automobiling on a Sunday, shows the reason for this "foreign" demand for registration. They started from their home city and took the road toward Boston. Everything went well until somewhere in Mansfield they were held up by a policeman.

"Where's your number?" he inquired.

"We don't have to have any numbers in Rhode Island," replied the physicians.

"No," was the gruff response, "but you have to have them in Massachusetts; and you're in Massachusetts now. It'll be all right this time, but don't let it happen again."

And that is why the Pawtucket men sent one of their number up to that city last week to apply for three sets of number plates and Massachusetts registration. The physicians didn't care to be restricted to their own side of the State line.

Several applications have come from New Hampshire men, and a number from those living just across the border in Connecticut. One New Hampshire man had to get a license because, although he lives and does most of his pleasure riding in New Hampshire, he runs over into this State every day to his regular business.

**Nantucket Resident's Fear.**

Four miles an hour is the limit for automobiles on the island of Nantucket, Mass. Some of the residents petitioned the Selectmen to prohibit the use of automobiles on the island altogether. They were too considerate to go that far. As to the speed limit, they were probably afraid that an automobile going at any reasonable speed might jump the island and give it a bad name. Nothing exciting ever happens at Nantucket.

**Regulating German Automobile Traffic.**

Count Posadowsky, German Secretary of State for the Interior, is said to have approached the governments of the several federal States with a view to the introduction of a law regulating automobile traffic throughout the empire. It is said further that, all the States having assented to his proposal, a bill will probably be submitted to the Reichstag during its next session.

**Automobile Pitted Against Trains.**

Races between automobiles and railway trains are possible in localities where the tracks and the highway are parallel, and the Motor World has already recorded one of an impromptu nature between East Litchfield and Torrington, Conn., which resulted in the automobile beating a New York, New Haven and Hartford train, the engineer of which was the challenger. Such races are more likely to be unpremeditated than otherwise, but a premeditated series of contests is to take place in Georgia as a means of advertising the interstate fair to be held at Atlanta in October. Secretary Welden has mapped out a schedule as follows:

Central of Georgia train from Atlanta to Macon; Atlanta and West Point train from Atlanta to West Point; Western and Atlantic train from Atlanta to Chattanooga; Seaboard Air Line train from Atlanta to Elberton; Southern train from Gainesville to Atlanta, and Georgia train from Union Point to Atlanta. It is thought that the race against a Central train will be the first of the series, and it is proposed to pit the automobile against the passenger train leaving Atlanta at 7:50 o'clock in the morning. This train makes the trip to Macon, a distance of 103 miles, in three hours and twenty minutes. The dirt roads along the several routes mentioned parallel the railroad for a considerable distance, and should the train and automobile be together at these points increased excitement and interest will be added to the contest. The automobile will be manned by the chauffeur and an advertising representative of the fair association.

**Bolee on Steering.**

A remarkable theory is put forward by M. Bolée, the French maker. The most perfect form of steering, he said, was to place one steering wheel at each end, with the drivers midway between them on each side of the car. An alternative arrangement, suitable for electric cars, was to couple up the steering and driving wheels diagonally—that is to say, with motors on a front and back wheel on opposite sides of the car, and the other front and back wheels connected for steering.

**Transporting Coffee in Motor Cars.**

An enterprising colony of American citizens in Nicaragua have adopted the automobile to transport their coffee from the plantations to the railway. They have built a macadamized road between the town of Matagalpa and a station near the city of Leon, which is smooth and hard enough to permit them to run automobiles, and they are now extending similar roads in other directions, which is very important because of the lack of ordinary transportation facilities.

These enterprising gentlemen are W. H. Desavigny, of Minnesota; A. Fromberger, of New York; Isaac Manning, of Indiana, and Peter Delany, of California, who have associated with them the Potter Brothers, of London, England. They have plantations at Matagalpa, which is a delightful part of the country, where there is an abundance of water from mountain streams, extensive areas of fertile soil and vast forests of mahogany, Spanish cedar and similar valuable cabinet woods. But the highways to the coast and to the little railway system of Nicaragua have been impassable for several months every year during the rainy season, and they have been compelled to store their coffee because they could not get it to market.

**To Levy on Automobiles in War Time.**

That the automobile may be made a useful accessory in war has just been recognized anew in the decision of the French War Office to include automobiles among articles upon which it will be advantageous to levy in war times. Hereafter, in the same manner as horse owners are obliged to cede their horses on requisition, so automobile owners will be obliged in time of war to cede their cars to the Government.

It is calculated that a corps of automobilists twenty thousand strong might thus be formed in time of emergency and used for rapid transport or scouting purposes. The Superior Council of War has also decided to create companies of chauffeurs attached to the sappers and engineers, and all new recruits having certificates as chauffeurs will be subjected to a special classification.

**Automobile Road at Ashville.**

What is said to be the first, and one of the finest, mountain roads for automobiles possible to be constructed in America is practically completed at Asheville, N. C. This road is exactly ten miles long and extends around two mountains. There is not a grade upon it in excess of five per cent. Along its line can be seen the Blue Ridge, the Great Smokies, the Elk Ridge, etc. Looking down into the city of Asheville is Sunset Mountain. Up to a few weeks ago a trolley road ran up to a park at the top of the mountain, and beyond that to Locust Gap, the point at which Rich Mountain joins Sunset. The electric road and Sunset Mountain are the property of the Howland Improvement Company, of which R. S. Howland, of Asheville, is president.

This corporation is interested in the development of the lumber industry in that section, and it became necessary to construct a road six miles long from Locust Gap around Rich Mountain and beyond it into the heart of the lumber district. The extension of the trolley road into this territory being impracticable, traction engines were utilized. The working of these showed the advisability of continuing them along the road from Locust Gap down Sunset Mountain to the city of Asheville, and there unloading the lumber. This necessitated the removal of the trolley tracks and the abandonment of the car line up Sunset Mountain. Mr. Howland then conceived the idea of creating an automobile route of both roads, and the plan is now being carried into execution.

It is said that the Homburg course chosen for the 1904 cup race is over very bad roads, with sharp curves abounding and also dangerous hills.

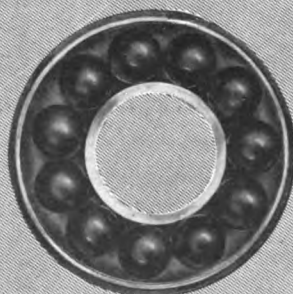
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## The Week's Patents.

738,772. Charge Inlet Device for Explosive Engines. Ferdinand Charron and Leonce Girardot, Paris, France. Filed March 22, 1902. Serial No. 99,493. (No model.)

Claim—1. An improved device for supply of combustible fluid in explosive motors, comprising a gas supply pipe fixed in position and terminating in a joint, in combination with a pipe pivoted at one end in the said joint and terminating at the other end in a cap which bears on the seat of the suction valve, a crosshead revoluble on a standard and bearing on the cap, and a nut which screws onto the screw threaded end of the standard and is adapted to press against the crosshead or to leave the latter free, substantially as and for the purposes set forth.

738,831. Electric Ignition Device. Arthur R. Mosler, New York, N. Y. Filed September 25, 1902. Serial No. 124,746. (No model.)

Claim—1. An electric ignition device comprising a hollow base, a cap engaging the same, an insulating back secured within the base and cap and projecting beyond the cap, a conducting wire within the block, a protector surrounding the exposed portion of the said block, and means engaging the conducting wire for forcing the protector against the cap and securing it in position around the block.

738,858. Exhaust Muffler. George F. Swain, Harvey, Ill., assignor of one-half to Henry E. Kellogg, Harvey, Ill. Filed October 20, 1902. Serial No. 128,050. (No model.)

Claim—1. In an exhaust muffler for gas engines, the combination with a chamber for confining the exhaust gas and having inlet and outlet passageways of a rod mounted

in the chamber, a series of cones mounted on the rod of alternately different diameters, and passageways in those of the largest diameters near the rod.

738,860. Explosive Engine. William W. Tuck, Richmond Hill; Abbot A. Low, Horse-shoe, and August Wassman, Hallet's Point, N. Y., assignors to said Low. Filed January 8, 1902. Serial No. 88,849. (No model.)

Claim—1. The combination with an explosive engine, of an exhaust pipe leading therefrom, an ejector connected with the lower end of said exhaust pipe, said ejector having a diaphragm extending beneath such connection with the exhaust pipe, means for forcing a stream of water from beneath said diaphragm across the discharge opening of the exhaust from said ejector above the diaphragm, and a common discharge for the exhaust and water from said ejector, substantially as shown and described.

738,942. Storage Battery. Frederick A. Redmon, Chicago, Ill., assignor of one-half to Albert W. Holmes, Chicago, Ill. Filed March 16, 1903. Serial No. 147,956. (No model.)

Claim—1. In a plate for storage batteries, the combination with a perforated metallic envelope, of absorbent substance inclosed in said envelope, and active material carried by said absorbent substance.

738,992. Sparking Plug. Henry C. Folger, Somerville, Mass. Filed June 4, 1903. Serial No. 160,015. (No model.)

Claim—1. A sparking plug having a central conducting spindle provided with a terminal, an exterior conducting shell provided with a second terminal, a double insulation separating the spindle and the shell, said insulation

738,997. Steering Mechanism for Motor Driven Vehicles. Elwood Haynes, Richard Wiley and Herbert Murden, Kokomo, Ind., assignors to the Haynes-Apperson Co., Kokomo, Ind., a corporation of Indiana. Filed December 29, 1902. Serial No. 136,928. (No model.)

Claim—1. In a steering mechanism for motor driven vehicles, the combination with the steering wheels, and the vehicle body provided in its floor with a slot, of a rotative shaft which extends downwardly through said slot below said floor, a worm gear mechanism below the floor operatively connecting said shaft with the steering wheels, a frame located beneath said floor in which said shaft has rotative bearing and which supports said worm gear mechanism, said frame being pivoted to a part below said floor, whereby the upper end of the shaft may swing toward and from the vehicle seat, said worm gear mechanism partaking of the swinging movement of the shaft.

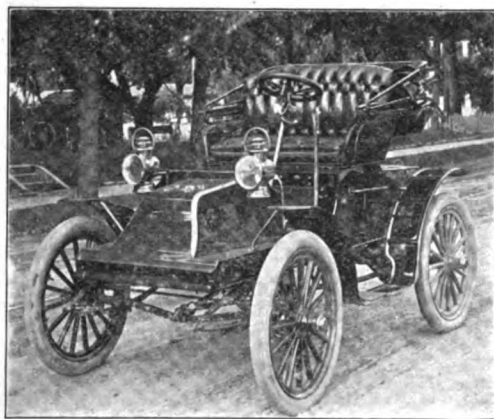
739,053. Vehicle Wheel. Louis Biava, New York, N. Y. Filed November 28, 1903. Serial No. 133,079. (No model.)

Claim—1. A vehicle wheel comprising a ring attached to the outer ends of the spokes, a radially rigid felly having a rounded outer surface attached to the ring by interposed springs, a transversely flexible tire attached to and bent over the rounded edge of the felly, and a soft rubber strip interposed between the felly and the tire.

739,095. Bicycle Alarm. Reinhold Lewitz, New York, N. Y. Filed April 1, 1903. Serial No. 150,604. (No model.)

Claim—1. A vehicle alarm, consisting of a hammer mounted to strike the vehicle frame, and means connected with a wheel of said vehicle for operating said hammer, substantially as set forth.

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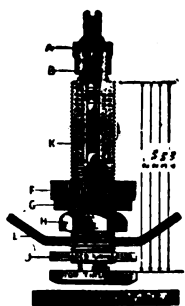
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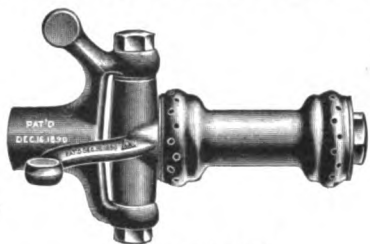
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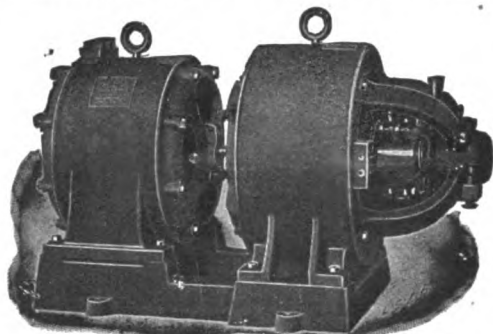
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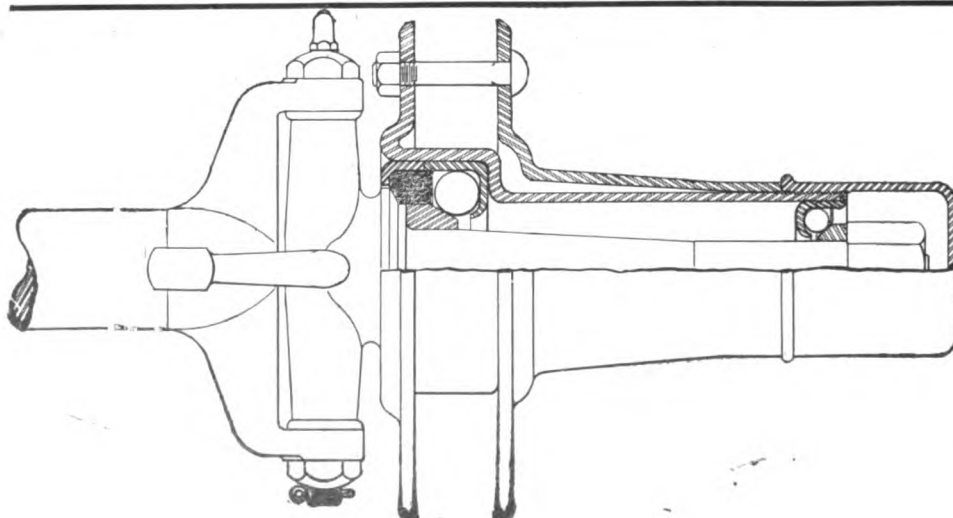
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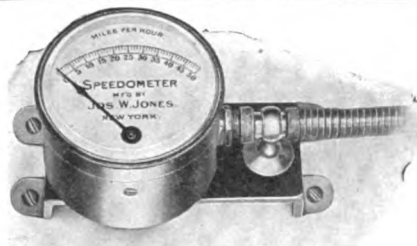
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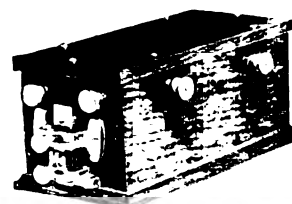
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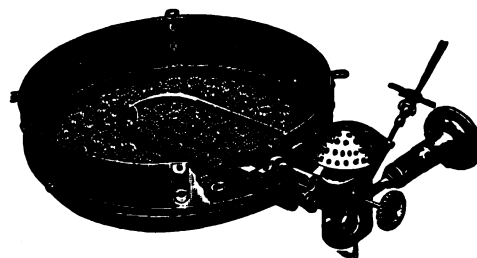
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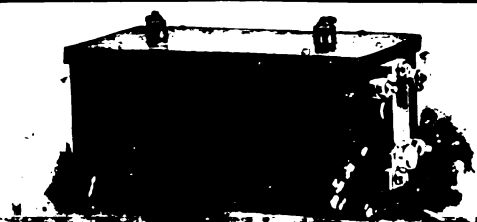


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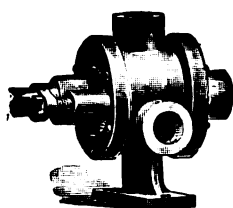




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## ELECTRIC STANHOPE FOR SALE.

GOOD AS NEW.

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## NEW YORK AGENCY

Selling agency for one of the most widely known popular priced motor cars, is open for Manhattan and the Bronx. Present line will be increased for next season, and agent in position to supply almost every demand. Applicants must have sufficient capital to conduct the business in a representative manner, and must bear the strictest investigation as to business integrity.

**MOTOR CAR,**  
**Care of MOTOR WORLD**

## BELL & COMPANY, Automobile Garage,

Specially designed building for storage and repairs for all types.

250 W. 80th St., New York. Telephone: 2562 River. OPEN DAY AND NIGHT.

## CENTRAL CITY AUTO CO.,

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Finest equipped garage in central New York.

## STORAGE REPAIRS.

Prompt Service and Good Work.

## RADIATORS,

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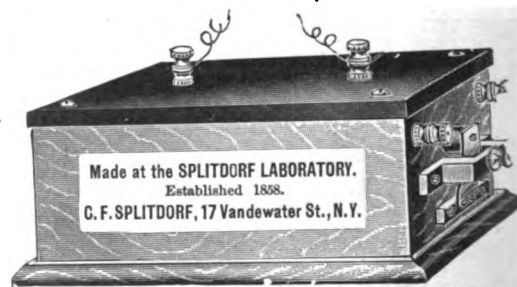
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Wood Bodies

Manufactured by

AMERICAN VENEER CO., 449 Pacific Ave.,  
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## A GOOD PLACE TO SPEND YOUR VACATION

during the summer months. The most pleasant resorts in the world are in Michigan.

The various resorts extend all along the east coast of Lake Huron from Detroit to Machinac. Accessible from Cincinnati and the South via



in from eight to twenty hours according to location. To those unacquainted with the Michigan resorts we offer the service of our passenger force in securing rooms and boat reservations. Before starting on your trip write us for our

"Summer Book on Michigan."

D. G. EDWARDS, Pass. Traf. Mgr.  
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# THE MOTOR WORLD

DEVOTED TO THE AUTOMOBILE  
And Kindred Interests

Volume VI.  
No. 26.

New York, N. Y., U. S. A., Thursday, September 24, 1903.

\$2.00 a Year.  
10 Cents a Copy.

Exclusive Design, Luxurious Appointments and the Most Perfect Mechanical Equipment Ever Installed in an Automobile Characterize the

## *Columbia* 24 Horse-Power Gasolene Touring Car

WE ARE NOW MAKING *IMMEDIATE DELIVERIES* OF THIS CAR.



COLUMBIA 24 H. P. GASOLENE TOURING CAR.

WE can also supply our latest model Electric Runabouts and Victorias at short notice. Orders for

**BROUGHAMS,  
LANDAUS,  
HANSOMS,  
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should be placed *NOW* to insure early Fall delivery.

WRITE FOR CATALOGUE. RELIABLE AGENTS WANTED IN UNASSIGNED TERRITORY.

## ELECTRIC VEHICLE CO., Hartford, Conn.

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*Member Association of Licensed Automobile Manufacturers.*

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(A Few of Many)

FOR

# THE DUNLOP TIRES

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## STANLEY STEAM CAR—

First award in Massachusetts Automobile Club Hill Climbing Contest, Boston, April 20th, with "Dunlops."

## DURYEA CAR—

First award in same Contest (in the Gasolene Class), fitted with "Dunlops."

## KNOX DELIVERY AUTO—

First award in New York Commercial Contest, on May 20th and 21st, with "Dunlops" (weight of vehicle, 3800 pounds).

## STANLEY STEAM CAR—

WORLD'S MILE RECORD, at Readville, Mass., on May 30th, with "Dunlops."

## C. H. CURTIS "HERCULES" MOTORCYCLE—

First award in New York Motor Cycle Club's Hill Climbing Contest, May 30th, with "Dunlops."

*THEY CAN BE RELIED UPON TO STAND THE TEST ON ALL KINDS  
OF MOTOR VEHICLES.*

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PHILADELPHIA,  
910 Filbert Street.  
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CLEVELAND,  
77 Bank Street.

The  
Hartford Rubber Works  
Company,

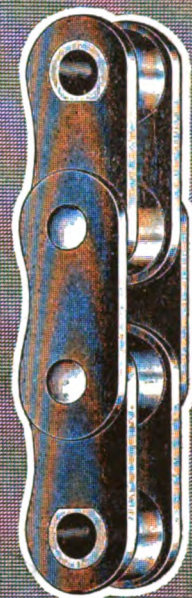
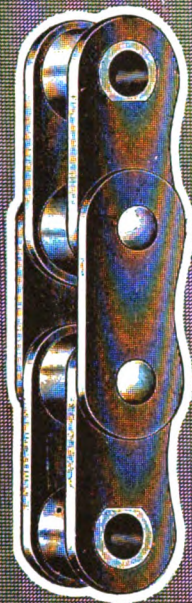
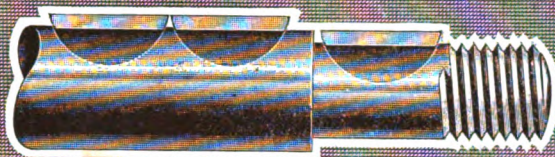
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# THE WOODRUFF PATENT SYSTEM OF KEYING



Insist on  
"WHITNEY"  
STANDARDS  
for dimensions  
of Roller Chains.

They have  
been adopted by  
many of the  
leaders, including,

"Cadillac,"  
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"Acme,"  
"Star,"  
"Grout,"

"Long Distance,"  
"Tourist,"  
etc.



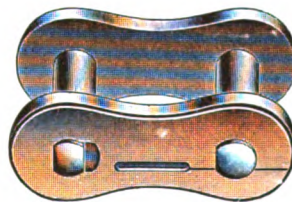
Investigate the 1904  
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Chains for

**Main Drive,  
Starting Device,  
Circulating Pumps,  
Cooling Fans,  
etc.]**

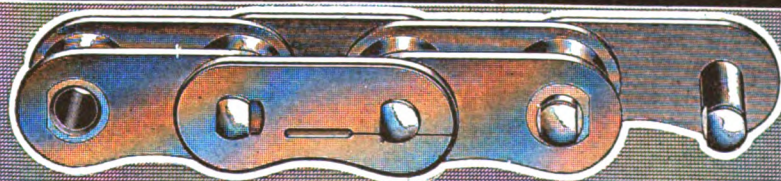
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**Motor Cycles.**

**The Whitney Mfg. Co.**  
Hartford, Conn.



"WHITNEY" SINGLE REPAIR LINK.  
Patents Pending.



## WHITNEY CHAINS

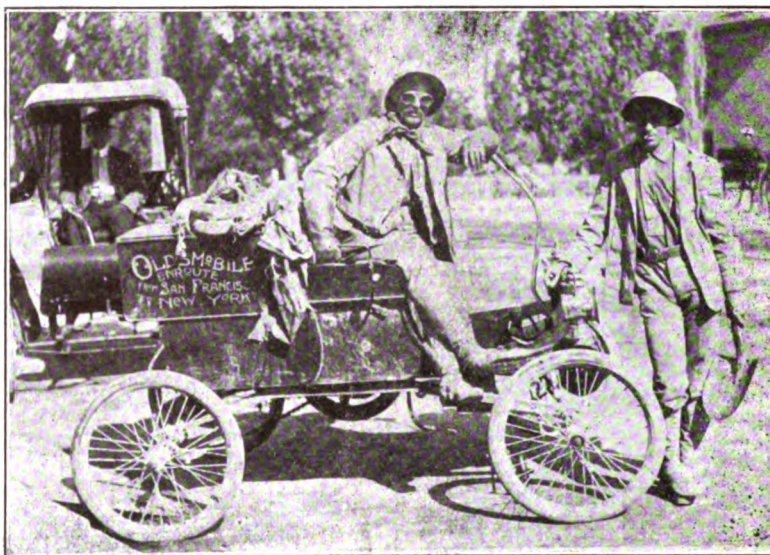
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# **From Coast to Coast at 1 $\frac{6}{10}$ Cents per Mile on DIAMOND TIRES**

**This was L. L. Whitman's tire cost on his transcontinental journey in a runabout.**



Ocean to ocean in a runabout—Whitman's arrival at Ogden, Utah.  
Notice how ruts have worn side walls of tires.

Mr. Whitman and E. I. Hammond left San Francisco on July 6th. Their machine was equipped with Diamond tires and none others were used throughout the trip. They successfully crossed vast deserts, great mountain chains, wildernesses of sage brush, and miles and miles of mud and rough sun-baked earth, reaching New York on September 17th, having been delayed in the west by floods.

## **THEIR TIRES SUFFERED BUT TWO PUNCTURES IN THE WHOLE GIGANTIC JOURNEY.**

From San Francisco to Denver—nearly 1,000 miles, over indescribable roads—but one puncture occurred. The other three tires were not even pumped.

One new tire was put on at Omaha, replacing one which had been run flat, practically ruining it.

The second new tire was put on at Chicago and two more at Detroit. When New York was reached all the second set of tires were in good condition, and three of the tires discarded can be repaired.

Making the fullest allowances for deterioration, including the new set of tires, the tire cost on the ocean-to-ocean trip was 16-10 cents—

## **SIXTEEN MILLS PER MILE !**

**THUS ONCE AGAIN IS IT UNQUESTIONABLY SHOWN**

**That DIAMOND Tires are Honest Tires,  
The Best because they are the Most Economical,  
And the Most Economical because they are the Best.**

---

**THE DIAMOND RUBBER CO., Akron, Ohio.**

**BRANCHES IN PRINCIPAL CITIES.**









